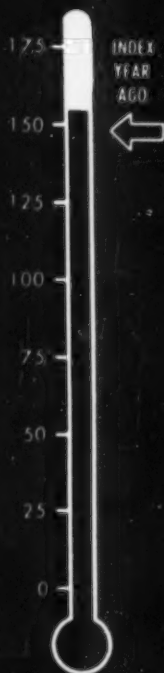


BUSINESS WEEK



Jonsson of Texas Instruments paves the road to production with Ph. D's (page 56)

A MCGRAW HILL PUBLICATION

DEC. 22, 1956

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UNIVERSITY MICROFILMS
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ANN ARBOR MICH
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A seed is a forest

Drop a seed into receptive earth. Up springs a tree to produce a thousand thousand seeds—and a forest is born.

Scientific research follows the same pattern, with ideas as seeds—with thoughtful men to nurture them in laboratories, and turn them to advantage.

In the past quarter century the seeds of many ideas have taken root in Shell laboratories and grown into needed products and services. They

include: a new way to synthesize glycerine from petroleum; Epon resins which make possible superior adhesives and protective coatings; pioneer methods for enriching the earth with ammonia; a unique and efficient process for making hydrogen peroxide . . . and many more.

Through research, Shell Chemical is perpetuating a very useful forest.

Shell Chemical Corporation

Chemical Partner of Industry and Agriculture

NEW YORK



GENERAL BUSINESS

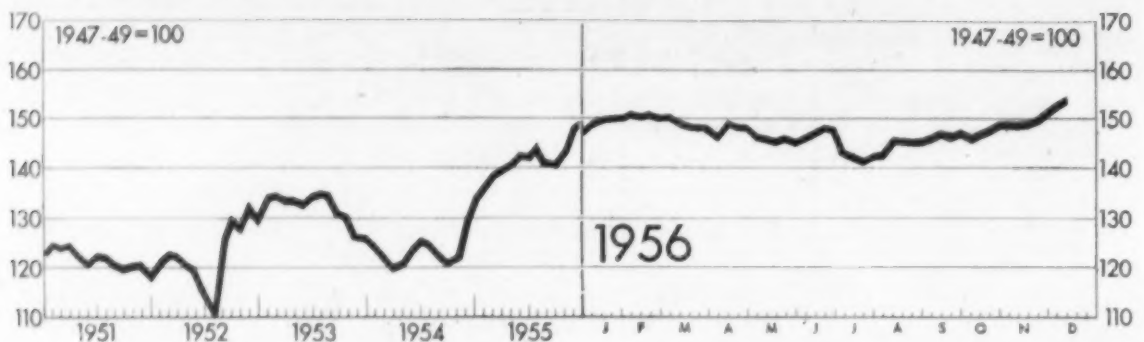
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FIGURES OF THE WEEK



BUSINESS WEEK INDEX (chart)

| 1946 Average | Year Ago | Month Ago | Week Ago | 5 Latest Week |
|-----------------|-------------|--------------|-------------|------------------|
| 91.6 | 150.7 | 149.5 | †153.6 | *154.8 |

PRODUCTION

| | | | | | |
|--|----------|----------|----------|----------|----------|
| Steel ingot (thous. of tons)..... | 1,281 | 2,338 | 2,463 | †2,522 | 2,511 |
| Automobiles and trucks..... | 62,880 | 203,868 | 167,410 | †202,290 | 198,163 |
| Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.)..... | \$17,083 | \$61,578 | \$59,070 | \$68,961 | \$73,264 |
| Electric power (millions of kilowatt-hours)..... | 4,238 | 11,602 | 11,589 | 12,047 | 12,220 |
| Crude oil and condensate (daily av., thous. of bbls.)..... | 4,751 | 6,946 | 7,165 | 7,353 | 7,355 |
| Bituminous coal (daily av., thous. of tons)..... | 1,745 | 1,823 | 1,713 | 1,823 | 1,768 |
| Paperboard (tons)..... | 167,269 | 296,461 | 278,966 | 275,418 | 281,309 |

TRADE

| | | | | | |
|---|----|-----|-----|-----|-----|
| Carloadings: miscellaneous and l.c.i. (daily av., thous. of cars)..... | 82 | 72 | 73 | 72 | 72 |
| Carloadings: all others (daily av., thous. of cars)..... | 53 | 49 | 56 | 53 | 51 |
| Department store sales index (1947-49 = 100, not seasonally adjusted).... | 90 | 235 | 137 | 196 | 225 |
| Business failures (Dun & Bradstreet, number)..... | 22 | 247 | 240 | 270 | 249 |

PRICES

| | | | | | |
|--|----------|---------|---------|---------|---------|
| Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)..... | 311.9 | 405.8 | 424.4 | 440.4 | 439.4 |
| Industrial raw materials, daily index (BLS, 1947-49 = 100)..... | ††73.2 | 102.1 | 100.6 | 100.9 | 100.2 |
| Foodstuffs, daily index (BLS, 1947-49 = 100)..... | ††75.4 | 74.2 | 82.0 | 83.4 | 82.6 |
| Print cloth (spot and nearby, yd.)..... | 17.5¢ | 20.8¢ | 19.2¢ | 19.0¢ | 19.0¢ |
| Finished steel, index (BLS, 1947-49 = 100)..... | ††76.4 | 154.8 | 168.8 | 168.8 | 168.8 |
| Scrap steel composite (Iron Age, ton)..... | \$20.27 | \$52.17 | \$61.33 | \$65.17 | \$64.50 |
| Copper (electrolytic, delivered price, E & M, lb.)..... | 14.045¢ | 43.745¢ | 36.000¢ | 35.955¢ | 35.955¢ |
| Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)..... | \$1.97 | \$2.22 | \$2.36 | \$2.33 | \$2.34 |
| Cotton, daily price (middling, 1 in., 14 designated markets, lb.)..... | **30.56¢ | 34.86¢ | 33.22¢ | 33.15¢ | 33.14¢ |
| Wool tops (Boston, lb.)..... | \$1.51 | \$1.70 | \$2.03 | †\$2.10 | \$2.20 |

FINANCE

| | | | | | |
|--|-------|-------|-------|-------|-------|
| 90 stocks, price index (Standard & Poor's)..... | 135.7 | 358.1 | 359.4 | 370.5 | 369.6 |
| Medium grade corporate bond yield (Baa issues, Moody's)..... | 3.05% | 3.63% | 4.24% | 4.34% | 4.37% |
| Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)..... | ¾-1% | 3% | 3% % | 3% % | 3% % |

BANKING (Millions of Dollars)

| | | | | | |
|--|----------|--------|--------|--------|--------|
| Demand deposits adjusted, reporting member banks..... | ††45,820 | 58,558 | 55,882 | 56,745 | 58,215 |
| Total loans and investments, reporting member banks..... | ††71,916 | 85,698 | 85,630 | 86,171 | 86,497 |
| Commercial and agricultural loans, reporting member banks..... | ††9,299 | 26,317 | 30,439 | 30,480 | 30,819 |
| U. S. gov't guaranteed obligations held, reporting member banks..... | ††49,879 | 29,559 | 25,599 | 25,820 | 25,883 |
| Total federal reserve credit outstanding..... | 23,888 | 26,428 | 25,954 | 26,165 | 26,633 |

MONTHLY FIGURES OF THE WEEK

| MONTHLY FIGURES OF THE WEEK | | 1946 Average | Year Ago | Month Ago | Latest Month |
|--------------------------------|----------|-----------------|-------------|--------------|-----------------|
| Bank debits (in millions)..... | November | ††\$85,577 | \$173,190 | \$193,140 | \$185,207 |
| Imports (in millions)..... | October | \$412 | \$1,011 | \$993 | \$1,120 |

* Preliminary, week ended December 15, 1956.

† Revised.

†† Estimate.

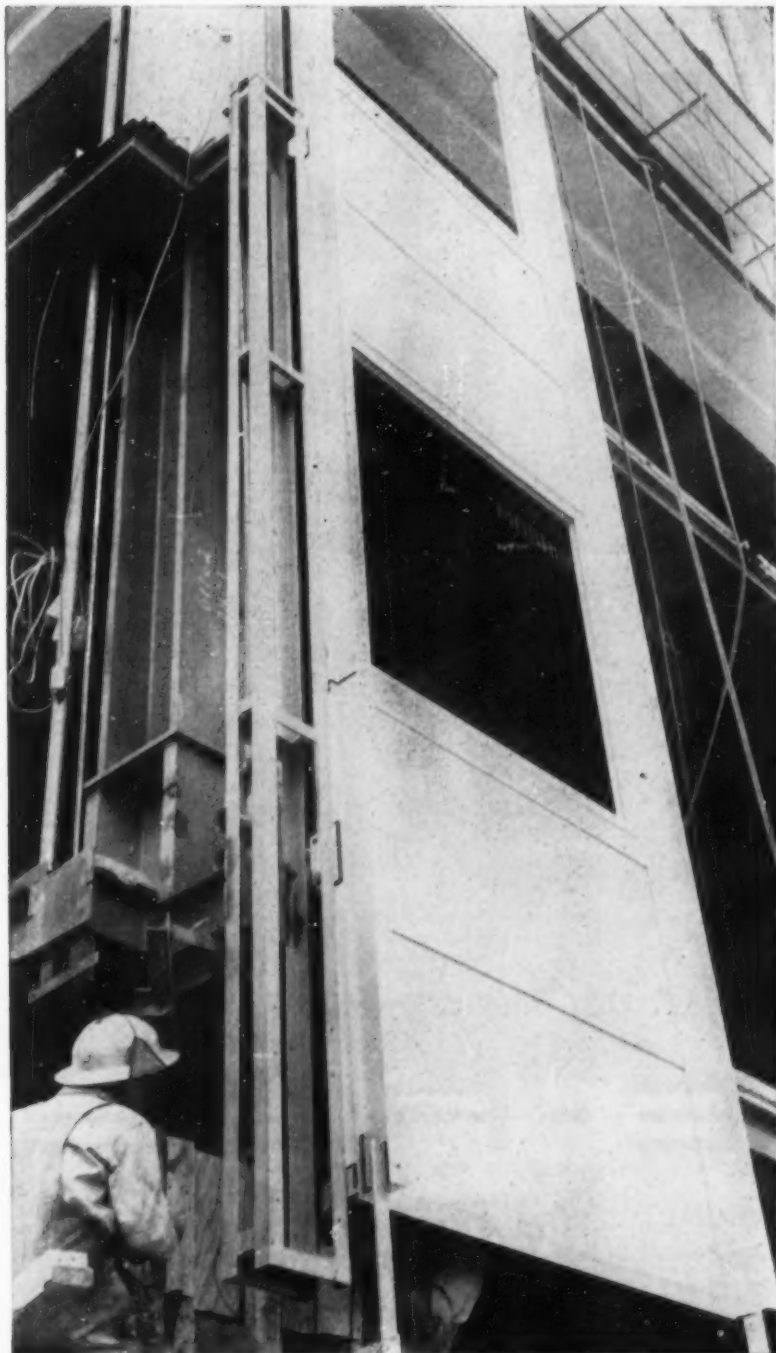
** Few designated markets, middling 1½ in.

‡ Date for 'Latest Week' on each series on request.

THE PICTURES—Bell Aircraft Corp.—105; Black Star—29, 84; Grant Compton—104; N. Bleecker Green—Cover, 56 (top lt.), 57 (bot. rt.), 58, 63; John R. Hamilton—114, 115, 117; Clyde Hare—34; I.N.P.—30; Frank Keating—74, 75, 77; Herb Kravitz—66 (bot.), 70, 71; Ivan Massar—56 (except top lt.), 57 (top); McGraw-Hill World News—28; Russell Malcher—66 (except bot.), 67, 68; Bob Phillips—33; Pittsburgh Consolidation Coal Co.—36; Radiant Mfg. Corp.—118; W.W.—32.

B.F. Goodrich adhesive report:

Building walls go up in days instead of months



Integrated Wall System by Texlite, Inc., Dallas, Texas

*Another use of
B.F. Goodrich adhesives
—what will they do next?*

IT took only 26 days to put up the walls of this building. It's a 13-story building so it would have taken 3 or 4 months if brick or blocks had been used. Instead, they used a new kind of wall—a thin panel of porcelain-enamel steel on the outside, insulation in the middle, steel inside.

But for a while this curtain-wall construction, as it is called, looked like one of those good ideas that wouldn't work. The trouble was with the adhesive holding the metal, insulation and inner steel wall together. Some adhesives were too hard to work with, others couldn't stand heat and cold, or did not have good water resistance. Some were so brittle there was danger of cracking; some were so soft there was danger of the panel sections pulling apart.

Then the manufacturer brought his problem to specialists in the B.F. Goodrich adhesive department. They recommended "Plastilock 604", a B.F. Goodrich adhesive that gives a flexible bond but is very strong. After it is "cured" under heat and pressure, the bond is stronger than the porcelain itself. This adhesive stands temperatures from 67 below zero to 300 degrees above. In walls of buildings it stands vibration, has good water resistance, will never loosen and will last as long as the walls themselves.

Plastilock 604 is one of the Plastilock family of adhesives that has been proved for years in brake linings, helicopter blades, and aircraft assemblies. B.F. Goodrich makes hundreds of kinds of adhesives for thousands of industrial jobs. For more information about Plastilock 604 or other adhesives to solve a specific problem, write B.F. Goodrich Industrial Products Company, Department M-821, Akron 18, Ohio.

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READERS REPORT

Sinclair's Interest

Dear Sir:

The shale oil article states, "Sinclair, however, reports that it has abandoned its experiments, indicating they did not show much promise" [BW—Dec. 15'56, p99].

However, Sinclair, which owns 4,700 acres of "shale-bearing" deposits in Colorado, having reserves of 876-million barrels, is continuing experiments with its patented underground heat wave method for the recovery of crude oil from oil fields. Further experiments of this type in the shale oil fields are planned for the future.

REYNOLDS GIRDLER

DIRECTOR PUBLIC RELATIONS AND
 ADVERTISING
 SINCLAIR OIL CORP.
 NEW YORK, N. Y.

Austrian Import

Dear Sir:

In your New Products Briefs [BW—Dec. 15'56, p104] an item was published on the sensational new Eumig electric camera. It was stated that the camera is "imported from Germany."

Please note that Eumig is an old-established Austrian firm, and that the new electric film camera is being imported from Austria. . . .

K. JOHN DOSMAR

THE AUSTRIAN TRADE DELEGATE
 NEW YORK, N. Y.

Capital Spending in '57

Dear Sir:

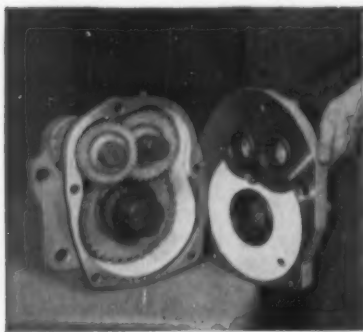
Since, in general, you did your customarily fine job in reporting our latest McGraw-Hill survey of How Industry Plans for 1957 [BW—Dec. 15'56, p31] I hate to enter a correction. But in the interest of that meticulous accuracy which we both cherish, I must.

In the table headed "Most Manufacturers Lift Their Sights" (page 32) you left out the capital expenditure figures for the petroleum refining branch of manufacturing industry. I assume this was done on the assumption that refining was being included in the totals for non-manufacturing industry, in which the figures for the petroleum industry as a whole are included.

However, the figure for petroleum refining should have been kept in the table for manufacturers' expenditures. With that figure



TRACK PINS AND DEAD AXLE SHAFT are subject to heavy stress and strain when the Oliver "OC-18" Industrial Crawler Tractor goes into action. Republic Cold Finished Steels at these vital points absorb shocks and wear of the most rugged service . . . help maintain Oliver's reputation for dependable performance plus economy of operation. Inset shows "OC-18" hard at work on Ohio Turnpike construction.



GEARS TRANSMIT POWER with maximum dependability when designed to make full use of Republic Alloy Steel's excellent physical properties. Formulated to provide great strength, toughness and wear resistance, Republic Alloy Steels allow bulk-free designs requiring less power to start and stop. Republic Metallurgists can help you apply these steels to your product. Mail coupon for full information.

LARGE TONNAGE, LOW WEIGHT are cost-saving features of this new Stainless Steel Volume Van. High strength-to-weight ratio of stainless allows thinner lighter sections with no loss of strength or safety. Result: 35% extra payload capacity. Republic ENDURO® Stainless Steel also offers exceptional abrasion and corrosion-resistance—best choice for long-term beauty plus low maintenance.



REPUBLIC



World's Widest Range of Standard Steels

IN TRACK PINS AND DEAD AXLE SHAFT

Republic Cold Finished Steel transmits 17 tons of driving power

When the mighty Oliver "OC-18" Crawler Tractor leans into a clay bank under full power, king-size forces are exerted against the dead axle shaft and track pins. That's why the Oliver Corporation, specifies Republic Cold Finished Steel for these vital parts in the 21-ton giant of their line.

Enormous push and pull strains and shocks are normal in the rugged service the "OC-18" is built to deliver. To protect final drive assembly from undue abuse, a four-inch Republic Cold Finished Alloy Steel Bar is used for the dead axle shaft. Combining extremely high strength and toughness, plus outstanding abrasion and corrosion-resistance, Republic Alloy Bars are more than a match for the tremendous forces involved.

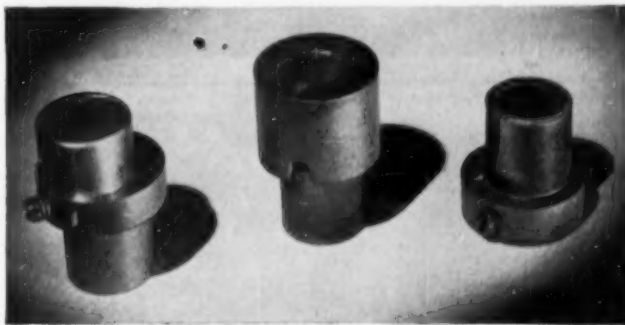
Equal dependability for "OC-18" track pins, is provided by Republic Cold Finished Carbon Corrected Steel. Years of service on other

Oliver models have proved this material exceptionally resistant to fatigue failure. In addition, maximum service life is assured by Republic's consistent quality . . . the basis for uniform surface hardness in each pin.

In countless other industrial applications, Republic Cold Finished Steel maintains superior standards of performance. Ultimate strength, yield point and hardness of any given steel analysis show marked improvement after cold drawing. Also, production economies can often be effected by taking advantage of the straightness, smooth surface, accurate size and excellent machinability of Republic Cold Finished Steel.

It will pay you to consider Republic Cold Finished Steel in terms of your production and application problems. Simply contact your local Republic Office or mail coupon for further information, today.

UNIFORMLY STRONG IRON POWDER PARTS are easier to achieve when you specify Republic Iron Powder. Its high green and sintered strength simplifies your processing and handling. Particle size and apparent density are carefully controlled. Uniform consistency is assured. Republic can help you determine suitability of your parts to iron powder production—or recommend other methods and materials.



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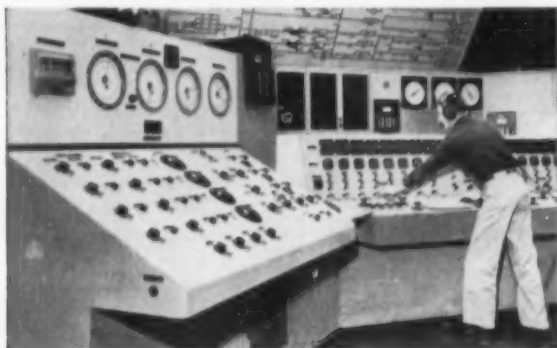
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Service Engineers of Hall Laboratories help thousands of industrial plants prevent costly water troubles, by on-the-job consultation service. Hall offers plant-wide service for every industrial water problem—from procurement to disposal.

MANAGEMENT MEMORANDUM: If your company has a problem that concerns any of the above, or related operations, please write us about it. Over 38 years of experience in these fields may save you a lot of trouble and money.

HAGAN
CHEMICALS &  CONTROLS, INC.

DIVISIONS:
CALGON COMPANY
HALL LABORATORIES
HAGAN BLDG., PITTSBURGH 30, PA.

When machine and load meet, the strain and wear on an engine can be costly. With a National Supply torque converter in the power train a lot of that tear and wear can be eliminated and maintenance kept down to rock bottom.



How much engine maintenance could you save with torque converters?

It's likely to be quite a lot, if you operate heavy-duty machinery from 100 to 1000 horsepower. Earthmoving, logging and mining are three fields in which National Supply torque converters can save engines a lot of wear.

For a National Supply torque converter is a fluid cushion. Shocks and vibration die inside it, before they reach the engine.

The engine is also protected from lugging and stalling. A National Supply torque converter never *takes* more power than the engine can *deliver*. Rather, the engine holds an almost-constant speed, while the torque converter automatically changes its own power and speed to match the requirements of the job.

With a National Supply torque converter, it is never

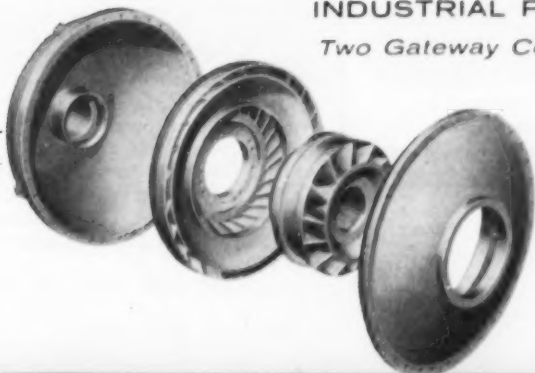
necessary to race the engine and suddenly engage the clutch—using the flywheel action of the engine to gain an extra surge of power. (This practice inflicts the power train with a shock as much as ten times the normal engine torque!) The torque converter multiplies the power of the engine when more power is needed. But it does it *smoothly*.

All these add up to big savings on engine maintenance. In addition, machinery with a National Supply torque converter gets more work done per day. How much would you benefit? Find out. A National Supply engineer can analyze your power transmission problem and tell you just what to expect. Write The National Supply Company, Two Gateway Center, Pittsburgh 22, Pa.

THE NATIONAL SUPPLY COMPANY

INDUSTRIAL PRODUCTS DIVISION

Two Gateway Center, Pittsburgh 22, Pa.



Pace-setters in the progress of industrial power transmission



How highway engineers increase your security on modern roads

The wide cars and trucks of today can barely pass each other on the old-fashioned 16- and 18-foot pavements built only a generation ago. Contrast this with the wider, safer pavements highway engineers design into modern roads. Not only do they build traffic lanes to a safe width, but when traffic requires it provide multiple lanes to carry the volume in each direction.

Because of concrete's long life, low upkeep and proven security it is the logical choice for the new roads now being planned.

PORTLAND CEMENT ASSOCIATION

33 West Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work

included, the table would have had the added entries indicated and the totals would then have been as follows, rather than the totals originally reported which are indicated subsequently.

| | Millions of Dollars | | |
|--|---------------------|-----------------|------------------------------|
| | 1956 Estimated | 1957 Planned | 1956-57 Percent Change |
| Petroleum Refining | 676 | 1,014 | +50 |
| All Manufacturing (including Petroleum Refining) | 12,647 | 14,434 | +14 |
| All Manufacturing as published | 11,971 | 13,420 | +14 |

Even so, a very Merry Christmas and Happy New Year to you.

DEXTER M. KEEZER

DEPT. OF ECONOMICS

MCGRAW-HILL PUBLISHING CO.,
INC.

NEW YORK, N. Y.

An Important Choice

Dear Sir:

We have noted the Personal Business item about the importance of the choice of an architect in preparing for the building of a home [BW—Dec. 1 '56, p. 149].

We think this article is especially suitable and wish to commend you on the excellence in preparation. . . .

R. N. SHEPARD

IRVING BOWMAN & ASSOCIATES
CHARLESTON, W. VA.

Dear Sir:

. . . This is the best article on the subject we have seen. It . . . is accurate in every respect. No architect could have done better in stating the position of our profession. . . .

TALMAGE C. HUGHES

EDITOR & PUBLISHER

THE MONTHLY BULLETIN

MICHIGAN SOCIETY OF ARCHITECTS
DETROIT, MICH.

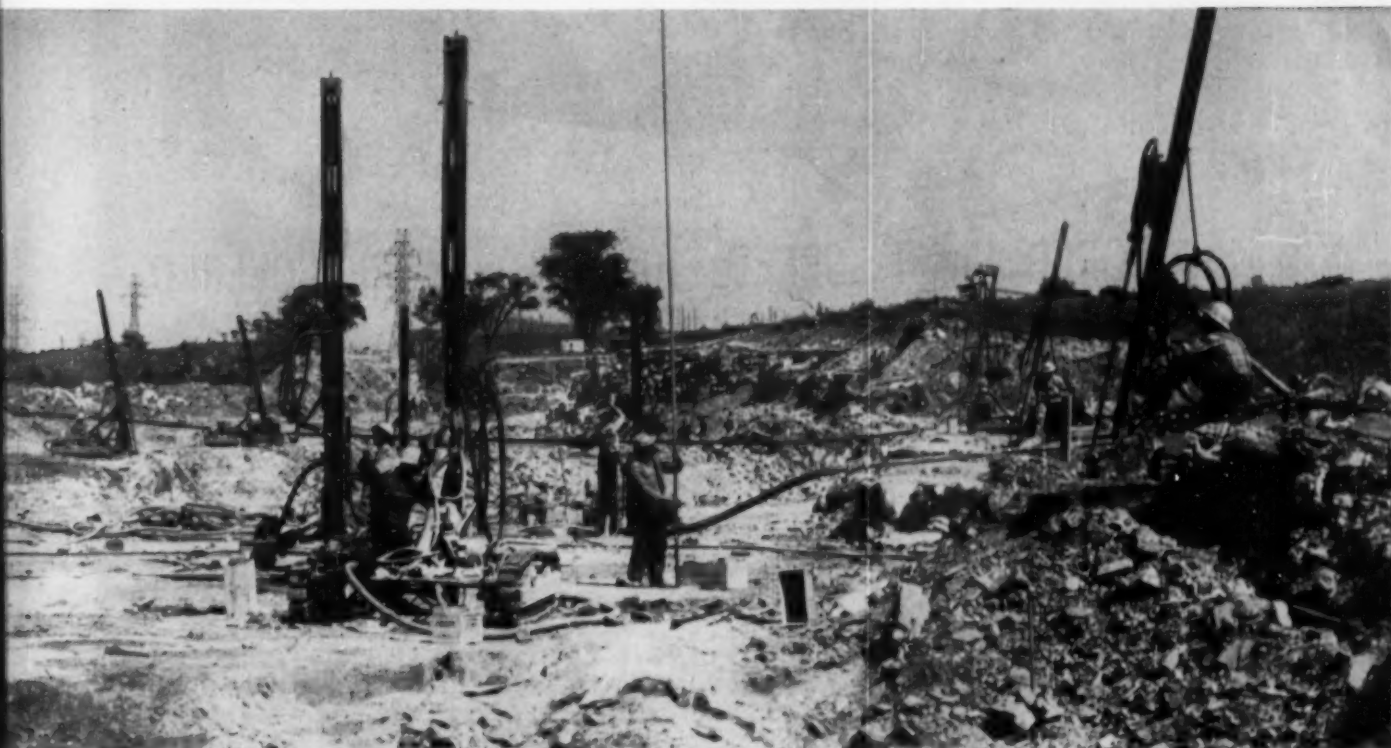
Manning the Counters

Dear Sir:

Manning the Christmas Counters [BW—Nov. 24 '56, p. 36] is an example of a one-sided piece of reporting. Although paychecks may be up and unemployment down, I doubt that this has the effect on department stores that you describe. People in the income bracket who would take such jobs still feel the need for extra money.

If you had talked to women who had held part-time jobs in department stores in previous Christmas

Gardner-Denver . . . Serving the World's Basic Industries



Deep holes for blasting out St. Lawrence channel being made by Gardner-Denver "Air-Trac"® Drills.

Drive for Seaway Deadline Against Mud, Rapids, Rock

Deadline for the grand opening is 1959. That year will mark completion of one of the greatest engineering projects of all time—the St. Lawrence Seaway. Their work punctuated by dynamite explosions, contractors push removal of millions of tons of rock from the site.

Speeded-up schedules take the most modern blast hole drilling equipment. So more than 69% of the rock

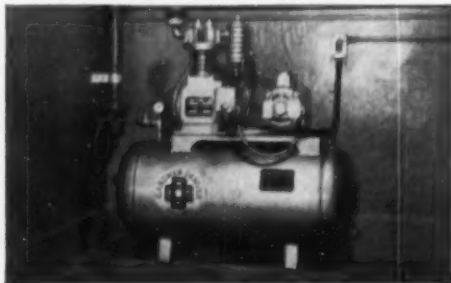
drills used by ten major contractors is Gardner-Denver—including 25 Gardner-Denver "Air Trac" drills, 18 wagon drills and four jumbo drills, plus Gardner-Denver portable air compressors to power the drills.

It's another of the many ways in which Gardner-Denver products are helping to change the face of the earth. *Gardner-Denver Company, Quincy, Ill.*

Gardner-Denver Rotary 600 compressor provides ample air supply for seaway drilling. One of many Gardner-Denver compressors on the St. Lawrence job.

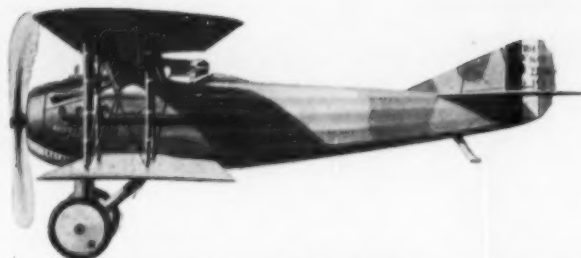
Automation gets a boost from Gardner-Denver tank-mounted compressor outfits like this one, which furnishes pure oil-free air to operate thermostatic controls.

Drilling close-tolerance holes in laminated titanium sheets presents no problem at this aircraft plant—for they are using Keller Tool "Airfeedrills"®.

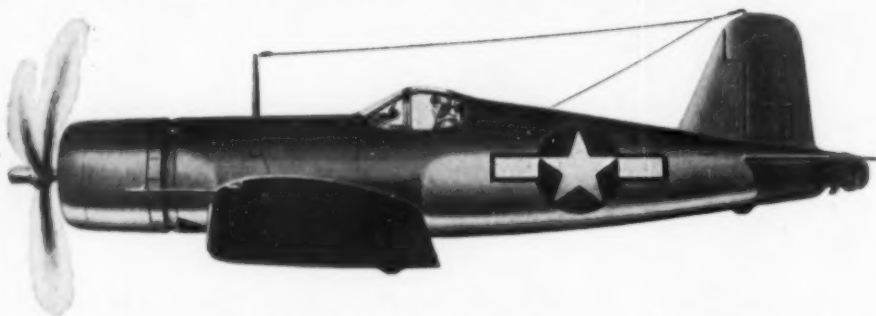


GARDNER - DENVER

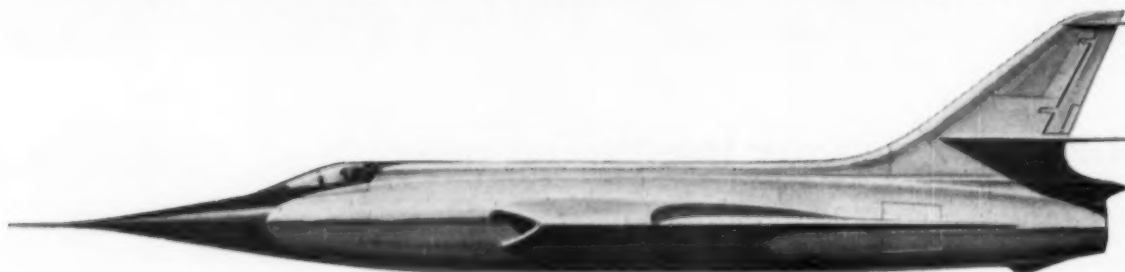
THE QUALITY LEADER IN COMPRESSORS, PUMPS, ROCK DRILLS AND AIR TOOLS
FOR CONSTRUCTION, MINING, PETROLEUM AND GENERAL INDUSTRY



WORLD WAR I...SPEED: 100 MPH...FABRIC-COVERED



WORLD WAR II...SPEED: 450 MPH...ALUMINUM SKIN



TODAY...SPEED: 2000 MPH...ARMCO STAINLESS STEEL

New Armco Stainless withstands terrific heat from air friction in today's supersonic planes

The newest military planes soon will be setting speed records of more than 2000 miles an hour. At supersonic speeds like this, air friction causes terrific heat. Temperature of the wings and fuselage may reach 600 F!

Under these conditions, fabrics—used in World War I planes—would tear apart. Conventional aircraft metals of World War II planes would be dangerously

weakened. But planes made of a new kind of stainless, known as Armco 17-7 PH, stay strong and rigid.

This new stainless or its companion grade, Armco 17-4 PH, can add value and sales appeal to many products. For example, they are being used for saw blades, springs, cutlery, fasteners, valves, pumps and a growing number of other applications.

If you need a workable metal that is exceptionally strong, hard and highly rust resistant, one of these special Armco Stainless Steels may be the answer. Why not write us today about your products and see.

ARMCO STEEL CORPORATION

MIDDLETOWN, OHIO



SHEFFIELD STEEL DIVISION • ARMCO DRAINAGE & METAL PRODUCTS, INC. • THE ARMCO INTERNATIONAL CORPORATION



W. D. Burnett, first vice president, Monolith Portland Cement Company

"Daily conference calls tie our widely scattered offices together"

"Co-ordination of sales and production is essential in selling cement," says W. D. Burnett, of Monolith Portland Cement Co. "And with plants and offices spread from Laramie to Los Angeles, the fastest way to co-ordinate is by telephone."

Key men meet daily on a 9:30 a.m. conference call. "Just like meeting around a table," accord-

ing to Mr. Burnett, "but faster, far less expensive. Helps us produce at the lowest cost, ship from the nearest plant. Most of all, it makes for better teamwork."

The telephone can help your business operate more profitably, too. A telephone representative will gladly tell you how. Just call your Bell Telephone Company business office.

BELL TELEPHONE SYSTEM



Conference Telephone Rates Are Low

Here are some typical daytime rates:

| | First 3 minutes | Each added minute |
|--|-----------------|-------------------|
| Three-way call: Los Angeles, Laramie and Denver | \$4.00 | 75¢ |
| Four-way call: Chicago, Milwaukee, Omaha and St. Louis | \$4.00 | 75¢ |
| Five-way call: New York, Boston, Pittsburgh, Baltimore and Trenton, N. J. . . . | \$5.50 | \$1.00 |

Add the 10% federal excise tax.



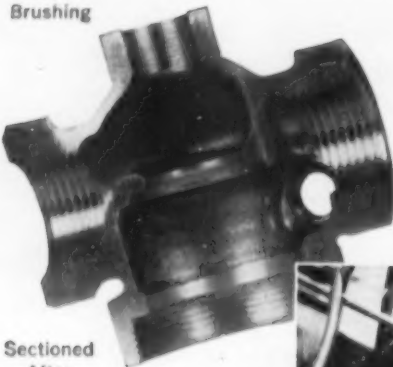
BRUSHING METHODS

• worthy of your confidence

Solving an inside job

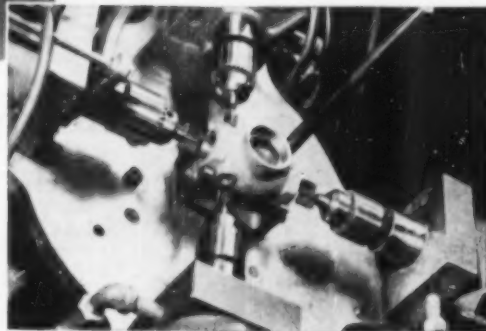


Sectioned
Before
Brushing



Sectioned
After
Brushing

Power brushing cleans
these four threaded holes
66% faster than
previous method.



REMOVING burrs and metallic particles from threads inside this valve body was once a tedious, time-consuming hand operation.

Today, using Osborn Situft® Brushes and a simple power brushing setup, the four threaded ports in this valve are deburred and cleaned in one operation . . . saving eight manhours per 1000 parts.

This and hundreds of other metal cleaning and finishing improvements made possible by power brushing are the reasons why Osborn has earned industry's confidence.

An Osborn Brushing Analysis, made at no obligation, will show how you can make substantial savings on many types of production with Osborn Power Brushing. Write The Osborn Manufacturing Company, Dept. A-88, 5401 Hamilton Avenue, Cleveland 14, Ohio.

Osborn Brushes 

seasons you would have found other reasons for the shortage of help there now.

Department stores are notoriously behind the times in organization. The confusion that results when extra personnel is hired is amazing. This, added to the chore of writing out long, complicated sales slips and following antiquated procedures, keeps many women away from such employment.

I held a part-time job at a department store in Chicago. After the store closed, it took on the average of one hour to punch a time clock, turn in money and sales book, and get my coat out of the check room—time spent standing in lines and time for which I was not paid.

It is my understanding that other businesses do not have much difficulty in finding part-time employees. One woman working in the personnel department of a department store told me that this year they are having trouble finding sales people, just as you say, but they have more applicants than openings for part-time office jobs in the store.

The poor working conditions combined with low pay make it surprising that the department stores find anyone willing to sell part-time.

JEAN COLBURN

CHICAGO, ILL.

Officially ICBM

Dear Sir:

The Trend The Only Answer to Blackmail [BW—Nov.24'56,p200] uses the designation IBM for the intercontinental ballistic missile. . . .

Initially, it was designated as IBM, which obviously led to some confusion with International Business Machines. Later I noted reference to the missile as ICBM, which helped distinguish it from the key punch company.

Your Trend, however, uses IBM and I am wondering what is the official designation of this weapon?

W. A. ROMAIN

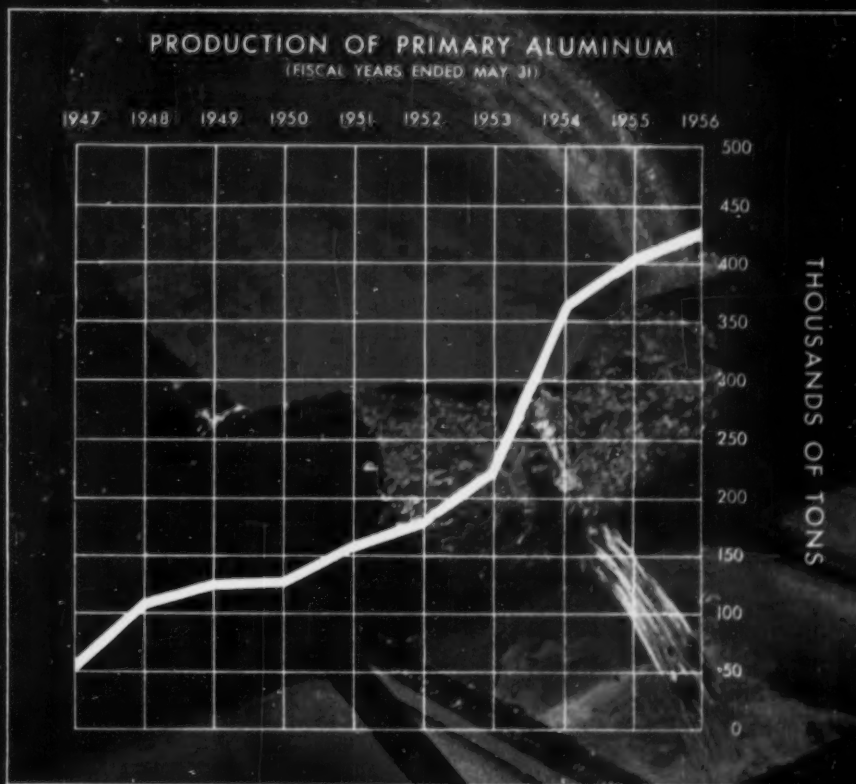
PRESIDENT

SHERMAN PRODUCTS, INC.

ROYAL OAK, MICH.

• The correct designation is ICBM.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.



REPORT CARD OF A TEN-YEAR OLD

THE chart above shows one phase in the growth of Kaiser Aluminum & Chemical Corporation during the past ten years—an increase in the production of primary aluminum from about 59,000 tons in 1947 to over 427,000 tons in 1956.

This seven-fold increase means that Kaiser Aluminum now produces more than two and one-half times as much aluminum as the entire nation did before World War II.

When all portions of the current and planned expansion have been completed, Kaiser Aluminum's total production capacity will be 682,000 tons of primary aluminum.

Spurred by the continuing growth and support of our customers, we have made major strides forward in all our operations during this past decade. Here are a few highlights...

Employees—from about 3,800 to more than 17,000.

Production facilities—from three plants to twenty-

one now in operation, and two more under construction.

Net sales—from about \$45 million to more than \$330 million.

Total assets—from about \$27 million to \$489 million.

As we enter our second decade, we are accelerating our expansion to bring more aluminum and even greater service to our customers.

If you would like to review the details of our steady growth, we'll be glad to send you a copy of our annual report. Kaiser Aluminum & Chemical Corporation, 1924 Broadway, Oakland 12, California.

Kaiser Aluminum
the bright star of metals

See "THE KAISER ALUMINUM HOUR." Alternate Tuesdays, NBC Network. Consult your local TV listing.

Staley solves waste disposal problem with an Allis-Chalmers tractor shovel



Cuts the trench. The first step in Staley's landfill system is to cut a trench. Their Allis-Chalmers HD-11G, with 111 net engine hp and a large-capacity hydraulic system, easily handles tough excavating. It is also mobile enough to carry excavated material to conveniently located stockpiles.

Spreads and compacts refuse. A truck dumps refuse at the head of the trench. The HD-11G then pushes or carries refuse with the bucket and spreads it in the ditch. Utilizing its 32,000 lb of weight, the crawler tractor compacts the material to a small fraction of its original volume.



Adopts highly successful landfill system

Most plants have one by-product and one problem in common. The by-product is waste and the problem is how to dispose of it. Staley Manufacturing Company, Decatur, Illinois, disposes of both the waste and the problem with an Allis-Chalmers HD-11G tractor shovel.

By adopting the sanitary landfill system, this large manufacturer of soybean and corn products now disposes of refuse quickly and cleanly. There are no unsightly dumps . . . no hillside "smudgepots" . . . no breeding places for insects and rodents. Further, the system requires a minimum of man power and equipment. This picture story describes how one Allis-Chalmers HD-11G tractor shovel handles Staley's three-step landfill operation.

This versatile machine can help solve your waste disposal problem—and double as a material handling and yard maintenance machine. Write for free literature on all four sizes of tractor shovels from 1½ to 4 cu yd, or see your Allis-Chalmers construction machinery dealer.

ALLIS-CHALMERS, CONSTRUCTION MACHINERY DIVISION,
MILWAUKEE 1, WISCONSIN

ALLIS-CHALMERS



Seals it in forever. At the end of each day, the tractor shovel takes dirt from stockpiles—2¼ cu yd at a pass—and spreads it over compacted refuse, leaving smooth, clean, level land. In many cases, useless lowlands have been reclaimed by the landfill system and later put to valuable use as playgrounds or building sites.



"Must have shrunk"



Like many a man's waist line, the job of a shipping container tends to expand with time. A few practical alterations may fit your corrugated box for its current role more effectively.


How long, for instance, has it been since you reviewed the copy and design on your container? Is it as attractive and informative as it can be? Your box is a low-cost advertising vehicle. It can also assure better warehousing and store display.

Your corrugated container representative may be able to recommend an improved design for added sales impact; more complete and rearranged identification copy to make your container easier for wholesalers and retailers to handle.

**UNION CORRUGATED
SHIPPING CONTAINERS**



Union Bag-Camp Paper Corporation
233 Broadway, New York 7, N. Y.

Take a good look at your shipping container.  Everyone else does.

**This Man Knows that
"An Ounce of Prevention"*
can Save You Money**



...He's Your Safety Director



***Here's a Type of Costly Accident He Prevents:**

In a recent case, a machine operator whose eye was permanently injured (loss of vision less than 20 per cent according to medical testimony) was awarded \$2,220 — \$20 per week for 111 weeks. The wearing of eye protection equipment prevents 99 per cent of these accidents according to the Society for the Prevention of Blindness.

The Safety Director also knows well how to protect worker and company against the hazards

of industrial noise, poisonous dusts and vapors and body and limb injuries. He should, he's a specialist!

As a leading maker of quality safety equipment AO† works closely with safety directors in reducing the costs of industrial accidents. If you are considering an Eye Protection program, for example, call us in for complete facts and figures. The program can pay for itself in less than six months!

American Optical
COMPANY
SAFETY PRODUCTS DIVISION

SOUTHBRIDGE, MASSACHUSETTS • Branches in Principal Cities



*Always insist on the AO trademark
on safety lenses and frames.*

BUSINESS OUTLOOK

BUSINESS WEEK

DEC. 22, 1956



Factories generally are closing out the year at the highest production rate ever achieved. Yet the gains in November and December may be attributed almost entirely to the **upsurge in autos**.

Many of the most active lines no longer are advancing. And there still are a few industries that aren't altogether healthy.

Output in November, measured by the Federal Reserve Board's seasonally adjusted index, stood at 147. That was the **third successive monthly advance** into new high ground—each month up by a point.

And it is likely that December will add another point.

Production of machinery—the rapidly advancing part of the economy over much of the last two years—seems temporarily to have stalled.

That's not too surprising when you consider its rise from an index number of 145 early in 1955 to 176 and 177 recently.

Producers' greatest problem now probably is steel. But there also are the complications of **money and manpower**. Any one of the three shortages can be bad, but all three at once require astute management.

One big Midwestern company's greatest worry recently was credit; now that problem has taken a back seat to getting steel plates.

Autos' influence fans out in the Federal Reserve Board's November indexes:

- First, you see the index for **car output alone** jumping to 148 against 117 in October. (And there's still a good bit of room for growth, for autos stood at 196 in November, 1955.)
- Next, **major consumer durables** went up to 143 from October's 130.
- Then, there's **transportation equipment**—a group that includes aircraft, ships, railway equipment, and trucks as well as autos. This category regained last year's peak level of 213.
- Finally, autos weigh into the total for all kinds of **durable goods**. This went to a new high of 166 (2 points above October's record, and 3 points higher than the best level of 1955).

Apparently the **outpouring of softgoods** also reached new records in November along with durables. The Federal Reserve indexed this at 131, just one notch higher than October's 130 (and 130 a year ago, too).

However, it is a bit of a mystery how this was done.

Production workers in softgoods totaled 5,543,000 in November, more than 100,000 short of a year earlier. Besides, their work-week was only 39.3 hours, exactly an hour less on the average.

Customers may be unable to get **all the steel they want**, but it is hardly the fault of the mills.

They're running at 102% of capacity—2½-million tons a week.

At the same time, no user can be blamed for trying to get a little extra. The incentive isn't just to beat the next fellow. It's also cost—for, even if

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

DEC. 22, 1956

base prices don't go up the first of the year as everyone expects, extras already are being raised.

—•—

Prices—and other costs—are bound to be playing a big part in the thinking of businessmen everywhere these days. Beyond the escalating cost of steel, there was this week's grant of higher freight rates and price boosts on cement applicable to many regions.

Average prices of materials and manufactures, at wholesale, have **advanced more rapidly in the quarter now ending** than in any three-month period of the last two years.

This Bureau of Labor Statistics index of all prices other than farm products and foods, though a slow mover, is up 2% for the quarter. And it has risen a little more than 7% since the end of 1954.

What's more, the rise shows no sign of slackening.

—•—

Money had passed through its period of greatest tightness by the end of **this week**—from the standpoint of seasonal demand, at least.

You saw long-term Treasury bonds go to new lows at midweek. And Uncle Sam paid the highest price in 23 years for short-term money (page 93). This was some measure of the **strain Christmas puts on credit**.

But, with the Yule rush over, money will flow back to the banks.

That should make loans more plentiful—maybe even a bit cheaper—always providing the Federal Reserve holds a "neutral" position.

Operations of the central banking system in recent weeks have actually eased short-term credit.

The Federal Reserve has **pumped well over \$1-billion** into the money supply (mainly by buying government securities). This has been to meet seasonal demand for bank loans—or, as it is often described, seeing that no legitimate business needs went unsatisfied.

Rumors were rife this week that the Federal Reserve would tighten credit further by once again hiking the discount rate. The talk obviously grew out of the drop in government bond prices.

However, the best bet still is that the Fed will stick to its wait-and-watch policy (BW—Nov. 17'56, p39) a while longer.

Corporate borrowers, for a few weeks at least, are likely to find bank loans a bit easier to get. Yet there is no sign of easing in long-term money—where permanent capital is raised.

That gives a company finance officer a **chance for fast footwork**.

If the timing is right, interest costs might be pared by going to the banks temporarily and delaying long-term financing.

Corporations now are lined up, waiting to sell somewhat more than **\$1½-billion worth of bonds and preferred stocks** early in the new year, according to compilations made by Investment Dealers' Digest.



How bankers "on the Sixth" can save you a trip abroad



"Bank-on-the-corner" service 'round the world

The 5,000 Citibankers in our 70 Overseas Branches, Offices, and Affiliates offer you all regular banking services plus our overseas facilities. As a customer, you are entitled to receive our Foreign Information Service — a unique and invaluable aid when you do business abroad.

FIRST IN WORLD WIDE BANKING

Before you go abroad on business, check with First National City. Our Overseas Division headquarters on the Sixth Floor at 55 Wall Street can always give you up-to-date information on developments in international trade. This information might save you a trip, or, at least, some cable costs.

On the Sixth Floor, you'll find a supervisory group of bankers with over 2,300 years of overseas banking experience. This group's officers have spent hundreds of years as *resident* bankers abroad. They speak the language and know the customs of the areas they supervise. Through them, information on foreign accounts is available from 185,000 current files.

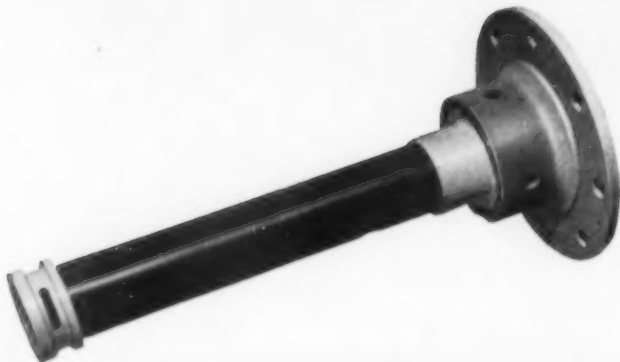
These experts can call upon 5,000 Citibankers who are actually "on the scene" in the Bank's 70 Overseas Branches, Offices, and Affiliates. They can also contact correspondent banks in all parts of the world. Customers come to the Sixth Floor from all over the earth to confer with our officers, and to be put in touch with American exporters.

Put our overseas bankers to work for you by contacting them at Head Office, or via any of our 75 Offices in Greater New York. By doing business abroad through First National City, your prestige here follows you overseas.

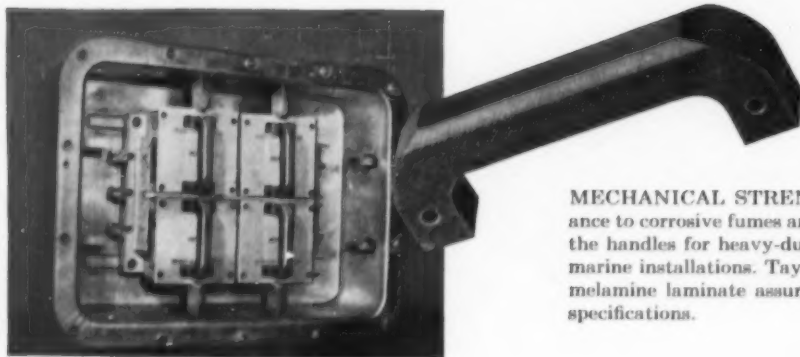
**The FIRST
NATIONAL CITY BANK**
of New York

Member Federal Deposit Insurance Corporation

Carry FIRST NATIONAL CITY BANK TRAVELERS CHECKS... Safe... Spendable Anywhere

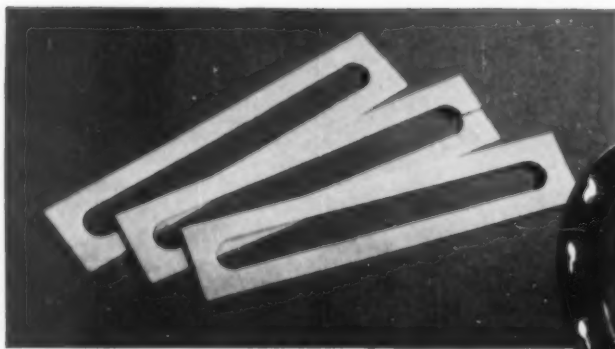


RESISTANCE TO CHEMICAL ACTION, stable electrical characteristics over wide humidity and temperature ranges, and light weight are essential in the rolled tubing of this new electronic fuel tank gage for military aircraft. Taylor Grade GEC glass base epoxy laminate gives outstanding service.

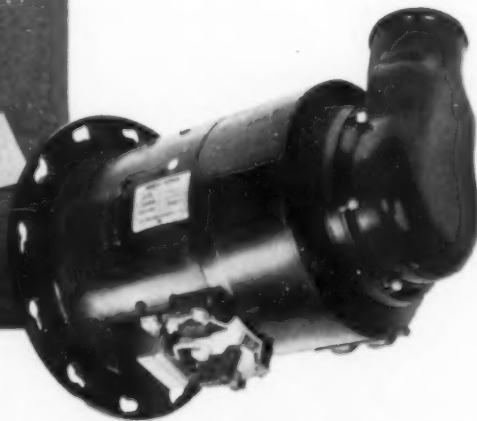


MECHANICAL STRENGTH and high resistance to corrosive fumes are vital characteristics of the handles for heavy-duty fuse boxes in special marine installations. Taylor Grade G5 glass base melamine laminate assures performance to rigid specifications.

Need high-performance

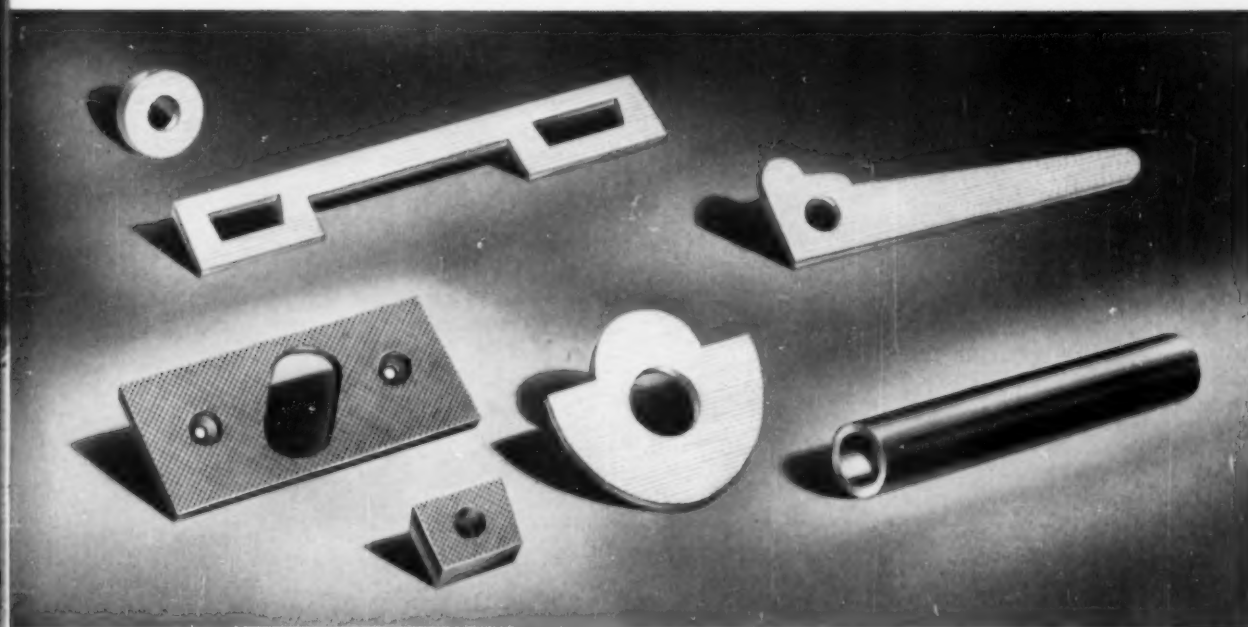


HEAT RESISTANCE far beyond that of usual insulation materials is provided by Taylor Grade GSC glass base silicone laminate used on rotor windings of air-blast cooled DC generator.



New Taylor Copper-Clad Laminates

Taylor GEC (glass-epoxy) Copper-Clad & Taylor XXXP-242 cold punching (paper-phenol) Copper-Clad. Taylor uses high purity rolled copper on base materials with outstanding electrical properties.



GLASS BASE LAMINATE PARTS, in a variety of shapes and sizes, are produced for customers in the Taylor Fabricating Division. Long experience, proper facilities and skilled personnel en-

able Taylor to help manufacturers avoid many scheduling, production and inventory problems . . . by fabricating close-tolerance parts to rigid specifications.

electrical insulation?

Taylor glass base laminates meet the most critical requirements . . . and Taylor can fabricate them to your exact specifications

THE SUPERIOR performance of Taylor glass base laminates in critical military and civilian uses points the way to a dual opportunity for manufacturers of electrical and electronic equipment.

First, these versatile insulation materials offer practical means of improving existing product performance. *Second*, they frequently make it possible to get new products off the design board into profitable new markets.

There are many grades of Taylor glass base laminates . . . each using a special formulation of Taylor phenol, silicone, melamine, or epoxy resin. This assures ready availability of an insulating material with the specific characteristics you need . . . even

for operating conditions normally considered extreme. Taylor produces these laminates as standard, volume products—in sheet, tube and rod form.

Many manufacturers find it to their advantage to have Taylor's Fabricating Division produce their glass base laminate parts. They count on Taylor's equipment, experience and specialized techniques to simplify production problems . . . safeguard schedules . . . eliminate inventory problems . . . and afford overall economies.

Get in touch with your nearest Taylor sales engineer for a discussion of how the unique combination of Taylor glass base laminates and fabricating facilities can be put to work for you.

TAYLOR FIBRE CO. Plants in Norristown, Pa. and La Verne, California

Branch Offices

| | | |
|------------|--------------|------------------|
| Atlanta | Detroit* | Philadelphia |
| Boston* | Indianapolis | Rochester* |
| Chicago* | Los Angeles | San Francisco* |
| Cleveland* | Milwaukee* | St. Louis |
| Dayton* | New York* | Rockville, Conn. |

Distributors

| |
|----------------------|
| Grand Prairie, Texas |
| Houston |
| Miami |
| Toronto |

*Teletypewriter service at both plants and these branches.

TAYLOR
Laminated Plastics
Vulcanized Fibre



SKF®

This cylindrical roller bearing is just one
of the high quality bearings produced by **SKF**.
SKF offers all four basic types of anti-friction bearings,
with *plus values* in every one.

7735



SKF

EVERY TYPE—EVERY USE

Ball Bearings
Cylindrical Roller Bearings
Spherical Roller Bearings
Tapered Roller Bearings (Tyson®)

* Reg. U.S. Pat. Off. Tyson Bearing Corporation

SKF INDUSTRIES, INC., PHILADELPHIA 32, PA.

For Retailers, Is There a Santa?

● By some standards, it seems not. Christmas sales are big but unlikely to match the 1955 record breaker.

● A lot depends on the final few shopping days. They have to be good to come close to 1955.

● It wouldn't be so sad if retailers hadn't had such high hopes for this season. The year as a whole is up.

This week retailers all across the country went into the final few days of Christmas business with eyes fixed as firmly on daily sales tallies as those of Longshot Louie on Pimlico's tote board.

By any standards—except perhaps last year's record sales and what now seem to have been over-optimistic expectations for this year—1956 will go down as one of the nation's biggest holiday seasons. Even that is not enough to satisfy retailers these days, especially when final figures are still in doubt. Already there have been enough disappointments to tarnish some of the tinsel.

• **The Score**—At midweek, BUSINESS WEEK reporters in key cities found this situation as the season and the year came rapidly to a close:

• Merchants in only three cities checked by BUSINESS WEEK—Cleveland, Houston, and Milwaukee—showed any real glee over Christmas sales. Retailers in other major cities admitted that the season could still measure up to 1955 Yule sales if things changed in the last few days. But there was plenty of doubt.

• Regardless of what happens in the last-minute rush, Christmas sales are not going to reach expectations—"not by a long shot," adds one Detroit merchant.

• For the year as a whole, though, retail sales (despite being held down by a 14% decline in automotive sales) will top 1955's all-time high by about 3%.

• But even this increase, considering (1) price boosts and (2) the far heavier inventories than even last year, can have a depressing effect on the marketing of goods as retailers enter the

slow period of January and February.

• **Mounting Anxiety**—It became clear as early as the first full week in November that retailers, accustomed to the jingling of cash registers from that time on, would have to sweat out 1956 results right up to the final day (BW—Nov. 17 '56, p. 34).

By the week ended Dec. 8, there were signs that some retailers were reaching for the panic button. Some price slashing began—toys, for instance, were cut sharply to speed up sales. Federal Reserve Board figures tell the story: For that crucial week, the U.S. total dragged 4% behind a year ago, with only the Minneapolis district showing a gain.

Last week, stores reported some gains, but, in the big New York City market, department stores reported another 5% decline—putting them 4% behind for the four-week figure.

Thus, everything depends on the week just ending. If it was a bust, so was the Christmas season.

• **Market View**—Here's a city-by-city rundown of retailers' views, as reported to BUSINESS WEEK with the season just about wrapped up:

New York—Merchants hoped they could make up in the last week the year-to-year losses they have been feeling since mid-November. Some reported all-time record days early this week, but the best they could hope was to pull the season up to 1955.

Chicago—Last-minute checks found retailers somewhat appeased as daily sales approached 1955 records. They won't top last year, though they may be able to match it if business held its pace.

Detroit—Final week sales are ahead of last year, but, said a merchant, "I

don't think you would say they were exciting."

Cleveland—After a slow start because of the newspaper strike, store sales have skyrocketed—with a 3% to 4% gain seen for the season.

Chief reason for this: pent-up demand that was loosed when papers began publishing again, huge advertising budgets (stores used both their November and December budgets in the final weeks), and big payrolls in this heavily industrialized area.

Pittsburgh—Sales aren't so good as retailers had hoped, and "a lot will depend on the remaining days." The betting: sales even with or slightly ahead of 1955.

Boston—There seemed to be no hope of matching 1955. Big stores were advertising hard to woo customers back from discounters, who reportedly were knocking down prices on even the most closely guarded fair-trade items, such as small appliances.

Milwaukee—Sales were running 7% over the same week last year.

Houston—Recent voices of doom have given way to enthusiasm. Said one big merchant: "We are hoping to reach our minimum goal of a 10% increase this year. Before the season we set a 10%-15% range."

Atlanta—Sales in leading department and specialty stores have been running even with last year or slightly (about 2%) below. The most any of the major retailers hopes for is a Christmas that will equal 1955.

Los Angeles—A late survey by the Security First National Bank gives this estimate: For the year as a whole, a 4.6% retail gain; for Christmas, almost an even break with 1955.

San Francisco—Merchants apparently felt they should be doing better, but, compared with 1955, things were good.

City after city reported that discount houses and shopping centers were doing big business, although some outlying merchants weren't hitting expected goals.

National chains haven't collected late Christmas figures, but one expected a yearly sales gain of better than \$75-million to \$80-million on a base of more than \$1-billion. The sales gain ran above \$120-million from 1954 to 1955.

In the Wake of Crisis: The U. S.

The U.S., unlike the U.S.S.R. or our principal allies in Western Europe, has emerged from the double-barreled autumn crisis with its strength unimpaired and its world prestige greatly enhanced.

Indeed, the U.S. finds itself today on a sort of solitary eminence—in such a strong position that the Eisenhower Administration feels able to shift away from the 10-year U.S. role as the leader, and normally the most belligerent member, of the Western alliance toward a role of world pacifier and leader.

The shift doesn't involve any letup in the U.S. drive to maintain a healthy air-atomic lead over the Soviet Union (page 27). But it does involve more emphasis on Eisenhower's "no alternative to peace" theme and more U.S. dependence on the United Nations.

- **Signs of Change**—Two events this week indicate that a shift is under way:

- At Gettysburg, Pres. Eisenhower and the hitherto neutralist Prime Minister of India, Jawaharlal Nehru, explored the basis of a new diplomatic partnership between the U.S. and India—with the aim of greater stability for the vast troubled area from the Suez Canal to the Formosa Straits. If this partnership develops, you will find the U.S. and India together filling the vacuum left by the decline of British power in the Middle East.

- The Administration has decided on a series of new arms control proposals, to be made to the Russians during the current session of the United Nations. If Moscow responds to this approach and agrees, among other things, to a European security system, the cold war would soon be at an end in Europe. In fact, the whole of Central and Eastern Europe would become virtually a demilitarized area, and U.S. relations with Western Europe would change fundamentally.

- **Altered Attitude**—Neither of these events means that the U.S. has lost interest in the Atlantic Alliance, or that Washington has any inclination to leave our European allies out of any European security deal with the Russians. But there's no doubt that the U.S. takes a somewhat different view of NATO than it did even six months ago. In Paris last week, Secy. of State Dulles made it quite clear to our European allies that NATO is strictly a European alliance. We still count on it as our primary alliance, Dulles indicated, but by no means the only important instrument of our international policy.

Then you've got the fact that Eisenhower indicated to Nehru that he personally is in favor of gradually relaxing U.S. policy toward Red China and of

getting along with Peking in the Far East.

- **Behind the Move**—Add it all up and you have a pretty definite shift in U.S. policy from the inflexible line Washington has taken, except for the Geneva interval, since the beginning of the cold war. It's a shift based on:

- Eisenhower's determination to bring peace and a rule of law to the world before he leaves the White House. His determination is even stronger than at the time of the Geneva Conference; it now has almost a Wilsonian fervor.

- The conviction in Washington that Moscow's rule is finished in Eastern Europe—that the Russian leaders must cut their losses there if they are to avoid serious trouble inside Russia, where there are reportedly a series of industrial strikes and widespread student opposition to both Soviet policy in Hungary and low living standards in Russia.

- A belief in the White House and the State Dept. that the U.S., in its long-term interest, must cooperate on its own terms—not on Anglo-French terms—with the Afro-Asian peoples.

I. Rehearsing the Overtures

The key element in the Administration's new thinking about arms control—underwritten by the National Security Council—is a willingness to explore with the Russians the possibility of a withdrawal or gradual reduction of American and Russian military forces ranged along the Iron Curtain in Central Europe. Until now, both great powers have stood fast on their military positions in Europe. Even now the Administration's decision does not go beyond a willingness to feel out the Russians. For one thing, there is no agreement yet within the Administration as to the terms on which the U.S. would pull back its troops.

One thing, though, is clear. The move probably will not take the form of a frontal diplomatic approach aimed at exploring a political settlement in Europe. Secy. Dulles made that quite plain at his press conference this week. Rather it will be a reconnaissance patrol under the cover of disarmament talks.

The approach of the National Security Council, strongly backed by the President, is important to these developments. It was vigorously opposed by some military and intelligence officials who believe that now, when the Russians are in serious trouble in Eastern Europe, is no time to offer concessions.

- **Eisenhower's Thinking**—The Presi-

dent, militantly backed by his disarmament adviser, Harold E. Stassen, apparently takes a view this week that can be summed up like this:

- The smoldering revolt in Eastern Europe offers great hope for a retreat of Soviet tyranny and military force from Central Europe. This, in turn, would make a world agreement with the Communist power much easier.

- But this hope could be foreclosed if the Russian leaders are given time to regain their balance—or if, in their efforts to bring the Eastern Europeans to heel, the Russians are forced into actions that put the world on the edge of war. (If revolt flares in Eastern Germany, that could happen.)

- Therefore, it is important for the U.S. at least to sound out the Russians on the possibilities, if any, of negotiating mutual withdrawal or reduction of U.S. and Russian forces in Europe.

- **The Logic**—Here's the reasoning behind this approach: Hungary has made it clear that the 60 satellite divisions are a positive liability to Moscow. Thus, Moscow may feel it has less of a military stake in Eastern Europe. The Russian leaders presumably are as aware as we are of the risk of major war in continued rebellion in the satellites, and presumably are as anxious as we to avoid World War III.

Simultaneously, the steady weakening of conventional NATO forces could make it seem less dangerous to the Russians to withdraw. At last week's NATO meeting, the British hinted that they might be forced to halve their forces in Germany for financial reasons.

Officials who agree with Stassen were encouraged by one paragraph in Marshal Bulganin's Nov. 17 letter to Eisenhower on disarmament. In this, the Soviet premier suggested for the first time the desirability of reducing forces in the NATO and Warsaw Pact areas. These U.S. officials were further heartened by this week's Russian agreement to limit the freedom of Soviet troops in Poland. It is hoped that a new Russian decision on what to do in Hungary, which can be expected from the upcoming session of the Central Committee of the Russian Communist Party, may shed more light upon Moscow's intentions in Eastern Europe and upon the chances for East-West agreement.

- **Bundle**—The effort to sound out the Russians is only one part of a big arms control package that Stassen has prepared for submission to the U.N. in February.

The U.S. is dropping its insistence upon installing a foolproof inspection system before beginning limited reduc-

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tion of conventional armed forces. Installation of an inspection system would proceed simultaneously with arms cuts. More important, the U.S. now is prepared to include suspension of hydrogen bomb and long-range missile testing if a satisfactory inspection and control system can be worked out. It also is willing to consider inspection on a gradual basis instead of all in one swoop.

The main objective of the Administration now is to get the arms control problem off dead center, before many countries develop and deploy intercontinental guided missiles and hydrogen weapons.

II. Chats with Nehru

In the other evolving area of U.S. foreign policy—our relations with the underdeveloped countries of Africa and Asia—Pres. Eisenhower and Prime Minister Nehru made some quiet progress toward closer cooperation. This exchange took place as the British and French, and many other Europeans, viewed American policy in the Middle East with continued skepticism—doubting whether our reliance on moral force would pay off in dealing with a leader like Nasser.

Highlights of the exchanges were reported to have been these:

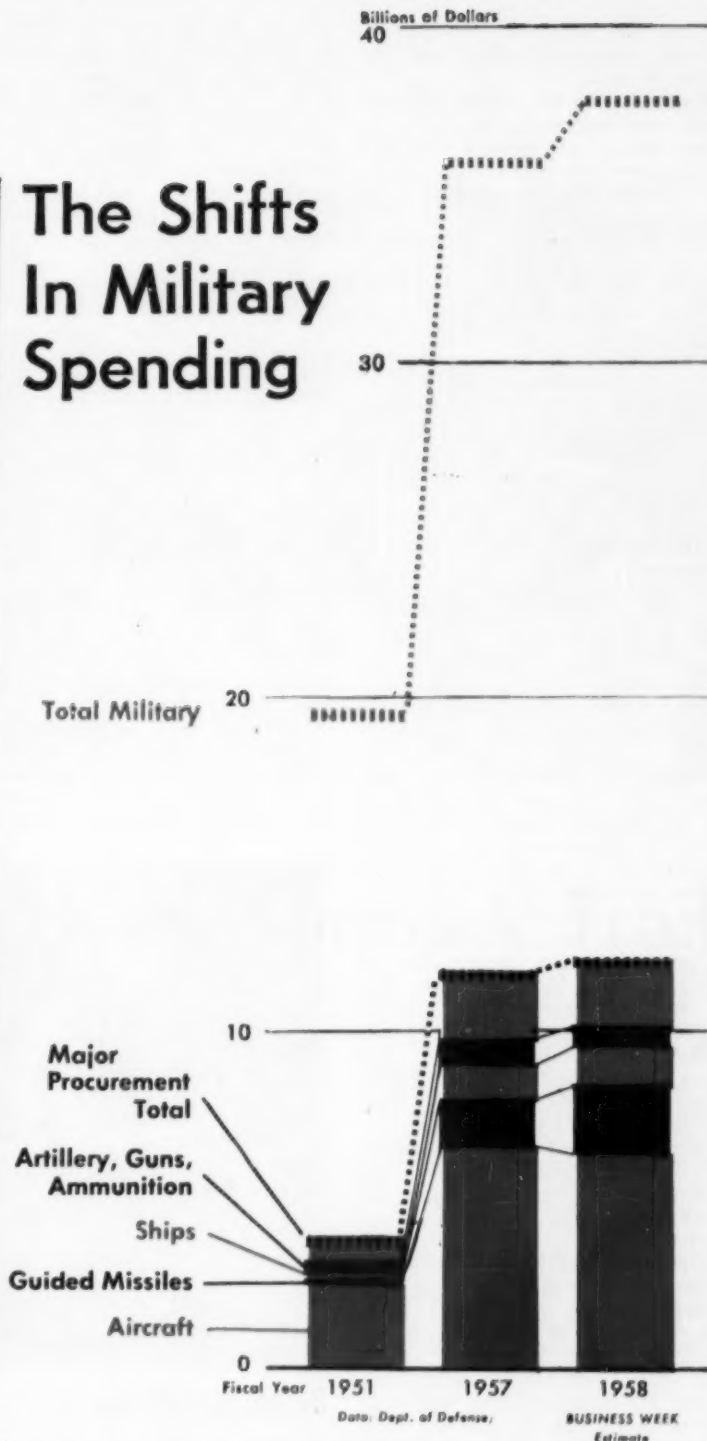
- Eisenhower intimated to Nehru that he is ready for a different China policy. But the President indicated that the remaining U.S. citizens held prisoner in China would have to be released before serious reconsideration could begin.

- Eisenhower pressed Nehru to use all his diplomatic persuasiveness with Pres. Nasser of Egypt to get a Suez settlement and move toward an Arab-Israeli solution.

- Eisenhower and Nehru agreed to disagree on the desirability of continuing the Baghdad and SEATO military alliances on India's borders. But the President stressed the importance of the economic development role of these regional groupings. Specifically, he informed the Prime Minister that the U.S. is ready to put a lot more economic aid at the disposal of the Baghdad powers—Turkey, Iraq, Iran, and Pakistan—to finance regional development projects as well as to help develop trade.

- The President expressed his own interest in helping India's second five-year plan, but his advisers hoped that he would tactfully point out the political difficulties in giving more aid so long as India remained so noisily neutral and so noisily socialistic.

The Shifts In Military Spending



THIS WEEK the Pentagon is putting the finishing touches on the fiscal 1958 military budget to be submitted to Congress next month. While some details are still to be spelled out, even at this late date, the new budget is expected to show expenditures of about \$38-billion—roughly 5% over the current level of spending.

To maintain this spending level, Congress will be asked to appropriate about \$38-billion for fiscal 1958, which is \$1.4-billion more than the Defense Dept. appropriations for fiscal 1957. According to Pentagon insiders, the three military services had pushed for at least \$6-billion more in new money authority. But, as usually happens, their

requests were trimmed down by the Defense Secretary's office and the Budget Bureau.

• **Pressure of World Affairs**—The new budget—the biggest ever in peacetime—reflects none of the growing talk about international arms controls. Up to now, the Pentagon has taken no stock in such proposals in projecting military requirements. Indeed, the pressures have been on the opposite side—to step up defense spending because of the war threats generated by the crises in Hungary and the Middle East.

In lining up next year's budget, the Pentagon took into account the recent revamping in service roles and missions and missile assignments (BW-Dec.1-'56,p39). This factor—plus the world crises—pushed completion of the budget well past the original deadlines.

The new budget is based on the major reappraisal of U.S. defense strategy—the so-called “second new look”—that has been under way for the past half year (BW-Aug.18'56,p149). This means a continued emphasis on the new weapons technology—strategic jet bombers, guided missiles, and nuclear explosives—and reduced reliance on ground troops and conventional arms.

• **Manpower Cuts**—However, manpower cuts next year will not be so big as originally planned. The main reason is diplomatic—to play up U.S. preparedness in the face of the Hungarian and Middle Eastern situations.

Actually, the armed forces now number 2.8-million men, 50,000 under their authorized strength. A reduction of about 50,000 is likely next year. This is only one third of the cutback originally scheduled. As part of this cutback, the military plans to strip down most standard divisions to 13,500 men from 17,500. Ultimately, these will be slimmed down even more.

Next year's boost in military spending will show up across the board—in operations and maintenance, research and development, and procurement and production.

• **Operations and Maintenance**—Operations and maintenance spending is expected to rise as much as \$1-billion. One big reason is increased fuel consumption. By next year, jet aircraft will have replaced propeller-driven fighter and bomber planes, turboprops will be moving rapidly into the transport field. Both consume vaster quantities—though cheaper qualities—of fuels than prop jobs. In addition, combat planes are flying more missions than usual, and heavier contingents of the naval fleet are being kept at sea because of the world crises. The likelihood is that both will continue indefinitely.

The increasing complexity of new military equipment also has pushed

up maintenance costs tremendously—in terms of man hours of work and supporting equipment required.

• **Research and Development**—Direct costs of research and development will go up by about \$100-million to \$1.6-billion. Yet this tells little of the increasing research and development effort. Pentagon experts figure that the total program—when everything is counted in—will cost over \$5.2-billion next year—a new record. About \$3.6-billion—earmarked for test and evaluation of equipment still in development and for support of the research program—is covered indirectly in the budget under funds for aircraft and missile production, shipbuilding, construction, and military personnel costs.

The biggest single chunk of the research and development spending—probably close to \$1.5-billion—will go for long-range ballistic missiles. Four projects are under way: The Air Force's 5,000-mile Atlas and Titan intercontinental ballistic missiles, and 1,500-mile Thor intermediate-range missile; the Army's 1,500-mile Jupiter IRBM. Increasing amounts of money are being spent for prototype models.

To keep R&D spending in line, Defense Secy. Charles E. Wilson has ordered the Air Force to take over the Jupiter project next July. Evening up the score, the Air Force's Talos land-

based, anti-aircraft missile development project will be taken under the Army's wing. The expectation is the duplicating projects will be merged or will be partially scrapped as a result of this action.

Two other costly research projects—the nuclear and chemically fueled bombers—are not going along so rapidly as was expected. Lags in technological development will limit expenditures for these.

• **Procurement**—Major procurement spending will rise some \$400-million to about \$12.2-billion. Part of the increase reflects increased output of test models of new equipment, but much of it also represents heavier volume production of new items going into operation.

This is the outlook on military hardware procurement:

• **Aircraft**, for the fourth consecutive year, will show a decrease. Production of the Boeing B-47 medium bomber has been phased out. Its successor, the Convair B-58, is still being flight-tested, and is not likely to become operational even next year. Meantime, production of Boeing's B-52 heavy bomber is being kept at 20 a month, despite loud demands for a speed-up. The B-52 is expected to be our first-line intercontinental bomber for at least five more years; deliveries are scheduled through 1959. New restrictions on the Army aviation program will hold down production of troop-carrier and other transport planes and the “low and slow”-fighter aircraft.

• **Guided missiles**, for which expenditures have more than doubled in the past three years, will climb at least 20% annually in future years. They now make up 8% of deliveries of aerial weapons to the Air Force; by 1960 the proportion is likely to be 35%. New missiles to be in bigger-volume production next year include Glenn L. Martin's LaCrosse, Studebaker-Packard's Dart, and Chrysler's Redstone for the Army; Boeing's Bomarc, Northrop's Snark, North American's Navaho, and Bell Aircraft's Rascal for the Air Force; Chance Vought's Regulus 2 and a ship-based version of McDonnell's Talos for the Navy.

• **Shipbuilding** will show an increase of about \$300-million. The boost represents deliveries and progress payments for the Navy's growing fleet of modern vessels. At least eight nuclear-powered submarines, 10 nuclear reactors for a cruiser and supercarrier, at least two supercarriers will be in production next year. In addition, five cruisers and a sub are being converted for missile firings. Conversions of four World War II carriers to larger angled-decks capable of holding jet attack bombers will be near completion.

• **Artillery, gun, and ammunition** output will be cut in half next year.



Brazilian Midgets

The baby cars parading down the streets of Sao Paulo, Brazil, are Romi-Izettas. The little two-seaters measure only a little over 4 ft. high and about 7½ ft. long, but were a big hit when they went on sale in Sao Paulo recently. The only door of the car opens to the front, and the steering wheel is attached to it. The Romi-Izetta, made in Brazil by Maquinas Agricolas Romi S. A., also is being sold in New York.



Gone is the "big top" (above), but . . .

Ringling's Back on Tanbark Trail

For the nation's millions of circus fans, the new year should be a happy one, after all. Their "big show" is going on.

Ringling Bros and Barnum & Bailey—which alarmed the addicts last summer by literally folding its tents—has lined up three tours, with indoor performances in arenas and outdoor dates at state fairgrounds. Missing will be the "big top" (picture above) and probably the colorful show train, but all else will be as usual.

Meanwhile, about 30 smaller road-tent shows are scrambling for hinterland dates. They're optimistic about a bigger payoff than ever, now that competition from The Greatest Show on Earth is limited to population centers.

• **Brighter Outlook**—Ringling Bros shut down on the road last July 17. It was beset by labor troubles, handicapped by bad weather, and overloaded with operating costs (BW—Jul. 21 '56, p. 27). Since then, it has become clear that though the day of the "big top" might be done, there's still plenty of life in the circus yet. Ringling Bros is going on the road again, come April, under new direction. Its labor troubles are easing (page 91).

And, importantly, planned economies brighten the financial outlook.

Management says the new show will be "a different circus concept," but still in keeping with the Ringling tradition of The Greatest Show on Earth.

• **Tour Plans**—As usual, the first of three tours now scheduled will open in New York's Madison Square Garden on April 3, for a 54-week run. In the past, the Garden has accounted for about \$2-million (or one third) of the circus' annual \$6-million gross. It's counted on as the strong financial foundation for the "new look" Ringling season.

After New York, the circus will play its traditional second indoor date in Boston. The big differences from the past will begin to show up when the troupe moves on to Hershey, Pa., Charlotte, Winston-Salem, Raleigh, and possibly Washington.

Until now, Ringling's "big top" train joined the circus on the road after Boston. It won't this year. There will be no "big top" or menagerie and side-show tents, no cookhouse, no wagons. All the dates through the tour's closing, in mid-June, will be played indoors in

arenas. Ringling will be a road show—living in hotels, eating in restaurants, patronizing local business instead of its own mobile facilities.

After a month's rest in Sarasota, the circus will hit the road again for 10 to 15 weeks of outdoor fairground dates, without a tent, or engagements indoors in air-conditioned arenas. The third tour, of western states, will begin in January, 1958, and last 10 weeks.

• **Two Economies**—Ringling Bros' "big top" tent cost about \$100,000 annually in recent years. Worse, it would fetch only a few hundred dollars at the end of its one-year life. This was only an initial cost. Even with mechanical developments, raising canvas takes a lot of manpower, at what management describes as "fantastic" labor charges. Only a few years ago, roustabouts were plentiful—and cheap. Traveling without canvas means a "tremendous saving."

It will also end another little known, but very real, problem: lawsuits alleging circus lot injuries. According to Pat Valdo, Ringling performance director, the big show "used to have all kinds of trouble with suits from people who tripped over tent stakes and such." But

in the future, he said, "when we rent an arena, we will be relieved of all that."

Ringling's 80 private railroad cars are being sold to a road in South America. Except for the Clyde Beatty Circus, other major shows now tour by truck. Ringling will move by regular train—to cut costs and, it hopes, avoid many of the costly delays experienced early this year.

Transportation will still be expensive—but a lot less than the rough estimate of \$750,000 for an 18,000-mi. season on the old schedule.

• **No Lot Problems**—The new plans also mean the end of another colorful institution—the circus lot—for Ringling. The show's advance men have found it hard to locate suitable vacant land in recent years. At the same time, with television in homes, fewer people are willing these days to go to out-of-the-way lots.

However, state and county fairgrounds are ready-made for Ringling needs. They have grandstands, livestock barns for the menagerie, a place for a midway, and parking. Most of them are centrally located, and residents are used to attending events there. Since there won't be a "top" for the acts, weather will be a problem. But the prospect is for more profit than loss.

• **A New Format**—Lately, the Ringling Bros management has been under frequent fire for "Hollywoodizing" the big show. Men with years of circus experience—many of whom had struggled to keep the show going after the tragic Hartford (Conn.) fire in 1944—left the organization. Outsiders in such groups as the Circus Fans Assn. of America seriously question recent policies.

So, for that matter, do minority stockholders. There is substantial talk in Sarasota and New York of efforts to overthrow John Ringling North and his brother, Henry North. It might result in another round in an old and sometimes bitter Ringling ownership battle (BW—Jul. 5 '47, p. 26).

Despite criticism, another showdown might be avoided. Some time ago, North brought Arthur Concello back as executive director, to succeed Michael Burke. Concello, veteran circus man and once a top aerialist, had been general manager of Ringling Bros until he was fired in a shake-up.

It's now considered likely that the glamorized, showgirl version of the circus will be toned down, in an effort to recapture some of the lost tanbark atmosphere—something that television can't duplicate.

• **Future Outlook**—In large part, the future depends on the success of the new tours. More arena dates are probable. For the coming season, many choice spots couldn't be booked because Ringling Bros was late starting.



GET-TOGETHER. Chmn. Eugene G. Grace of Bethlehem (left) and Chmn. J. L. Mauthe of Youngstown are bucking antitrust action in their new merger attempt.

Why They're Trying Again

The steel industry this week was betting that there would be little delay in getting the government's injunction suit against the merger of Bethlehem Steel Corp. and Youngstown Sheet & Tube Co. actively into trial.

While Bethlehem was readying its answer to the action filed in U.S. District Court in New York (BW—Dec. 15 '56, p. 44), the trade guessing was that long-drawn-out preliminaries for the actual court battle were unlikely.

The industry was frankly speculating—but it cited solid reasons for its speculation. The two companies and the Justice Dept., industry men agreed, had worked closely enough together in bringing the matter this far to make them ready and willing for a speedy trial. This the companies want badly, and apparently the Justice Dept. is anxious for the same thing.

• **Reshuffle**—The merger, if it went through, would make only a modest reshuffle in the list of the top 10 producers. The new property would be second largest—as Bethlehem now is. It would have—on the basis of expansion programs now official for each property—a total capacity in sight of 29.75-million tons, though that figure will doubtless be larger by the time the issue finally is resolved.

By that time, including announced expansions, U.S. Steel will have at least 41.7-million ingot tons of capacity. Thus, it would be perhaps only 30% larger than the next largest producer, rather than almost double the size of the second producer—as was the case last Jan. 1.

With the merger in effect Youngstown would vacate its present place as

the sixth largest producer. So Inland, Armco, Colorado Fuel & Iron, and Wheeling would each move up a notch. At least temporarily, Sharon Steel would move up to be the 10th producer, although Kaiser Steel's expansion could move it ahead of Sharon by the time merger litigation is settled.

• **Steelman's View**—The proposal is a natural from a steelmakers' viewpoint, since the companies are so complementary. Bethlehem operates where Youngstown doesn't. Youngstown operates where Bethlehem doesn't. Each is heavily engaged in products and markets in which the other does not compete.

Although there are several important product lines in which each is a producer—light flat-rolled products, mainly—there is only a rather small competitive area between the two, primarily because of the location of their mills. When steel producers pay the freight, they prefer to sell as close to home as possible. That hard economic fact mitigates against very much competition between Bethlehem and Youngstown when the industry operating rate sags very far below capacity.

• **Long Wait**—In its modern version, the merger has a 30-month history. In mid-1954, the companies announced they planned to get together. By fall, the Justice Dept. had made public its opposition (BW—Oct. 9 '54, p. 25). There the matter rested, at least publicly, for 27 months until the two signed a merger agreement a couple of weeks ago.

According to the companies, the hold-up arose from the lack of any assurance from the government that everything possible would be done to

attain a speedy settlement of the issue. There has been no evidence, in recent weeks, however, that the companies yet have any such assurance from the Justice Dept., even though the department seems anxious to push along.

Pending a settlement, no price for the Youngstown properties has been agreed upon.

- **Earlier Try**—The apparent joint desire of the parties for a rapid settlement has considerable merit on the basis of history. Very late in the 1920s, an attempt was made to combine the two properties. It was snagged by a stockholders' suit in which Cyrus Eaton, Cleveland financier and at that time an important figure in Youngstown, was the principal plaintiff.

Ultimately, the companies won that legal tussle. But by then their plans were wrecked by the worst operating years in the industry's history.

- **Impatient**—With such a long history, both ancient and modern, behind the merger effort, the sudden burst of speed might seem surprising. But steelmen pretty much agree that Bethlehem is getting impatient—and has a good reason to be.

As steelmen see it, Bethlehem needs to make a decision within a reasonable time on whether it is to get into the Chicago area by acquiring Youngstown in exchange for stock, or whether it will have to build to get in.

And if Bethlehem should have to build, the sooner it could get at it the better because of rising costs.

Steel producers now in the Chicago area are already expanding. For that reason, it's the industry view that Bethlehem can't wait much longer if it is ever to become a factor in that area.

- **Why Chicago?**—Bethlehem's yen to break into the Chicago area comes partly from the fact that Chicago is the only major market it's now fenced away from. Bethlehem's Buffalo plant gets into the Detroit market via lake transport of sheet and other products, but it can't mill the long haul to Chicago.

Steelmen see more than just that fact in the picture, however. They point to two fundamental factors:

- The greatest steel market in the world—now and for the predictable future—lies between the Alleghenies and the Rockies.

- The heart of that market lies in the Chicago district. That means within few enough miles of the lower tip of Lake Michigan that a producer can ship steel to customers—while absorbing the freight—at a mill net return better than that of any producer outside the district.

This doesn't apply to every product, of course. Bethlehem has sold wide-flange beams profitably in Kankakee, Casper, and Cadiz for almost 50 years

—with and without a patent monopoly, and under three different systems of pricing. It will continue to do the same whether it makes them in Chicago or Bethlehem. The same is true of turbine rotors and the heaviest castings poured.

But these aren't the volume steel products any more. The volume lies in sheets of all kinds, including tinplate, and in various forms of bars, plus some other products. And the place where the greatest number of these products are chewed up in the greatest volume—and most steadily, year in and year out—is within a \$5 freight haul of Chicago.

- **Costs**—Bethlehem, of course, will continue to be an overpowering No. 2 producer for years, whether it gets a Chicago location or not—unless the basic economics of steel change in ways no one can now foresee. But the consensus of steelmen is that Bethlehem will never be more than that without a Chicago location—at competitive costs.

That's where a Youngstown merger—and the haste—come in. Twenty-seven months ago, the absolute minimum price in the stock market for the Youngstown property figured out at \$45 per ton. Last week the cost worked out to \$69 per ton—a jump of 52%.

But alongside that, consider the cost of new capacity if Bethlehem had to build. Twenty-seven months ago the cost of a new, integrated ton of capacity, including raw materials, was no higher than \$250 per ton, perhaps less. Now, even if Bethlehem started right away, it's hard to figure that it could build this capacity in the Chicago district for as little as \$350 per ton by the time it got operating.

- **Strong Bid**—Bethlehem has said that if the merger went through, it would add 2-million tons finished capacity at Chicago and 1-million at Youngstown. With Youngstown's rated capacity at Indiana Harbor of about 2.7-million tons of sheet, strip, pipe, and so on, the Chicago addition would give Bethlehem nearly 5-million tons capacity in the area. That wouldn't be close to U.S. Steel, but it would be a lot closer—and capable of fast growth.

- **Jockeying**—A lot of merger details remain to be ironed out—perhaps because the parties wanted to get things started toward an antitrust settlement. At any rate, that still leaves a little room for jockeying for position.

Some steelmen see a bit of that jockeying in Youngstown's recent top management shift (BW-Dec. 1 '56, p. 174), which moved Pres. James L. Mauthe up to chairman—in perhaps a better position to compete for a top spot in a merged company—and brought Youngstown's younger management men to the front, too. (Or it might have a connection with reports that not all Youngstown's management favors the merger.)

1-Million Plus

That's the forecast for housing starts in 1957—assuming the present credit tightness doesn't worsen.

The Administration has decided to let the housing industry struggle for another year at the same level as in 1956—just over a million starts. That's the interpretation being put on a number of official pronouncements in recent days, and private forecasters are adjusting their sights accordingly.

Housing starts are now running at an annual rate of 1,060,000, and for 1956 as a whole, will be close to 1.1-million. Industry seers are predicting anywhere from 1-million up to 1.2-million in 1957, assuming the present credit tightness gets no worse.

- **A Comedown**—If these predictions are borne out, it will be the eighth straight year in which starts have hit 1-million or more. At one time, the industry would have hailed this as a great achievement: now it strikes most builders as a comedown. They're willing to write off record-smashing 1950—the first year to break the 1-million mark—as something exceptional. Starts totaled 1,352,000 that year. But they would like to see housing heading back to something like the 1,201,700 of 1954, or the 1,309,500 of 1955.

The Administration goal of a little above 1-million starts has been disclosed by Housing Administrator Albert M. Cole, who recently called that level "satisfactory." There are signs that this will not rest well with Congress, particularly if it involves any cutback in veterans' housing—as it could.

- **Higher Mortgage Rates**—The Veterans Administration took a step this week to reassure lenders on veterans' mortgages. It said that mortgages currently being negotiated may bear the highest interest rate permitted when the loan is closed. This means that if the current limit of 4.5% interest on GI mortgages is increased by act of Congress next year, the higher rate will be effective.

The Administration may request an increase to 5%, in order to bring VA-insured mortgages into line with the recently established 5% rate for Federal Housing Administration-insured mortgages.

- **Equal Rules**—Another possibility is that the VA rate will be left where it is and the program allowed to die out. This proposal—favored by a group of lawmakers influential in housing legislation—is to liberalize FHA regulations to a point where they at least equal

VA rules. This would give veterans and non-veterans alike access to loans on the same basis that is open to veterans now only through VA. In this case, there would be no reason to continue the special GI program.

If a knockdown fight seems to be looming over the interest rate, Congressional housing experts may duck the issue altogether. There is support—particularly among Democrats—for the idea advanced by Rep. Olin E. Teague of Texas, chairman of the House Veterans Affairs Committee. Teague favors a sharply expanded direct-lending program by the VA in lieu of increasing the approved mortgage rate.

• **Direct Loans**—VA already has authority to make direct housing loans to veterans in all but 390 of the country's 3,100 counties, if veterans can show they cannot obtain loans at approved rates. Veterans living in cities are barred from this source of funds under present regulations. VA has only \$92-million available for direct loans at the present time, and this would be used up rapidly if city dwellers were allowed access to the funds, as some congressmen favor.

The Administration is ready to fight on this issue. W. Randolph Burgess, Under Secretary of the Treasury, last week said he opposed direct mortgage lending, and he spoke with the support of the White House.

• **White House Shoring**—The Administration is taking other means of assuring that housing starts do not drop during 1957. It will ask Congress to increase the line of credit the Federal National Mortgage Assn. has in the Treasury. Fanny Mae obtains funds from the Treasury to purchase mortgages from private lenders, thereby maintaining a flow of fresh funds into the housing market. Its current authorization will be exhausted by Mar. 1, and Congress is expected to vote fresh funds immediately. There is likely to be a move to liberalize rules that now limit Fanny Mae's purchase of mortgages to 10 times its capital stock. The Administration is also counting on the new 5% rate on FHA-insured mortgages to stimulate the flow of mortgage funds after the first of the year.

The Administration hopes such measures will be sufficient to hold starts at their present rate. Officials point out that on a seasonally adjusted basis, starts have been firm at an annual rate just a little over 1-million for the past six months. They interpret this to mean that the housing industry can get enough mortgage credit—even in a period of general credit stringency—to maintain this level indefinitely. If there are signs of another sharp slump in starts such as occurred early in 1956, all bets will be off.

Either Way, It Looks

CIVILIAN atomic power is bound to benefit from an argument in the coming Congress. The basic question: Which side can do more for the atomic industry? Issues are summarized in the table at right.

On one side is Atomic Energy Commission Chmn. Lewis L. Strauss (picture), the Administration's spokesman for a new and more liberal policy toward power reactor development (BW-Dec. 15'56,p42).

On the other side are Democratic critics of AEC's record, including Sen. Albert Gore (picture), whose bill for federal construction of reactors was narrowly beaten in the House last summer (BW-Jul.28'56,p105). The ideas of the Tennessee Democrat are backed by Sen. Clinton P. Anderson (D-N.M.), outgoing chairman of the Joint Congressional Atomic Energy Committee, and presumably shared by the new chairman, Rep. Carl Durham (D-N.C.).

• **Cruz of Debate**—Anderson, Gore, and other Democratic leaders, supported to some extent by AEC Commissioner Thomas E. Murray, argue that the AEC program, leaving initiative in the hands of private industry, doesn't guarantee enough power reactors soon enough. The Gore bill called for \$400-million in federal funds to build five or six large reactors and an unspecified number of small ones.

The new policy line spelled out by Strauss provides for what some experts estimate to be about a \$160-million program. Strauss' proposal calls for:

• Continuing the program of trying out a wide variety of reactors on a large scale, but with a firm new deadline—no industry proposal to be considered unless it can produce power by June 30, 1962. However—and this is a major turnabout for Strauss and the Administration—if industry fails to come forward with projects, the government should build the reactors.

• Priority in this program for five new-type reactors: a heavy water, natural uranium reactor of at least 100,000 kw.; an aqueous homogeneous reactor of similar capacity, and three smaller reactors of various types.

• More government money to be offered to industry for research and development costs, both on new projects and those already under way. The offer should be broadened to include not only reactor design but also such areas as chemical processing, improvement of materials, heat transfer methods, and fluid mechanics.

• A waiver or a reduction of charges for using nuclear fuels (all of which are owned by the government) and a schedule of fees for chemical



Sen. Albert Gore

Both have
Expanding

Here's the proposal of the . . .

DEMOCRATS

SIZE OF PROGRAM U. S. should spend at least \$400-million to get atomic power plants underway immediately

RESEARCH More money should be spent to develop new types of reactors

FINANCING Government must begin major building now

SUBSIDIES Additional federal money should be spent for federal reactors

SALE OF ATOMIC POWER Public power bodies should have priority on power from government projects

processing of nuclear fuel elements in government plants.

• **Swallowing Gore Plan?**—To some people in Washington and in the industry, it looks as if the Administration is adopting features of last summer's Gore bill, enough so that it will be hard to oppose a revival of that legislation.

The two major reactors specified by

Like a Lift for Power Reactors



AEC Chmn. Lewis L. Strauss

plans for Atomic Power

Here is what's planned by the ...

REPUBLICANS

SIZE OF PROGRAM New stepped-up program just announced calls for about \$160-million for reactors

RESEARCH We're moving ahead as fast as we can in this field

FINANCING Government should build only if industry fails to step up its program

SUBSIDIES More federal funds are needed to help industry

SALE OF ATOMIC POWER Government projects, if built, should supply AEC—none to other users

Strauss were also specified in the Gore bill. The natural uranium reactor, in particular, is favored by Congress for its export market potential: Foreign users wouldn't have to come to the U.S. for enriched uranium fuel. The natural uranium is much cheaper, too.

The aqueous homogeneous reactor is regarded as more venturesome. West-

inghouse Electric Corp. and Pennsylvania Power & Light Co. want to build one and try it, but it is no secret that the design is causing trouble. The combined coolant-fuel solutions are highly corrosive and tend to leak. In short, the PP&L project is unlikely to meet a June 30, 1962 deadline.

The other reactor types in the Strauss program are even more experimental. Thus, if the 1962 deadline prevails, it looks as if the government, under either party's program, will be building reactors before long, whether it prefers to or not.

• **Public Power**—Strauss didn't refer to one big issue in atomic power: Should public power bodies get first call on power from government-financed reactors as they do already in federal hydroelectric projects?

Democrats are almost solidly behind the preference clause for government-generated hydro or atom power—the atomic energy law is so written that it extends the public power preference to nuclear projects financed by the government. This week, the politically influential American Public Power Assn. raised an insistent voice to retain that preference.

Strauss and the Republicans see no need to commit government-generated power to municipalities, public utilities districts, and rural electrification co-operatives. They say AEC itself will need for its atomic installations all the power that any government-built reactors would produce in the near future. Their program, in fact, would earmark all such power for AEC's own use.

• **Progress Report**—Strauss has to report in February to the joint committee that Rep. Durham will head. He hopes to be able to show enough progress in the last six months to stave off a new federal reactor bill. He can point to these developments:

• Three new applicants for power reactors—Carolina-Virginia Nuclear Power Associates, Middle South Utilities, Inc., and New England Electric System. This makes 20 civilian atom power plants, of which Strauss says at least 18 will meet the 1962 deadline, and a total of more than 220 reactors of all types under way in the U.S.

• Faster declassification of atomic information, with an exchange of much new information among the U.S., United Kingdom, and Canada. There's a move to ease secrecy regarding uranium production, mill capacity, and ore reserves (page 120).

• Aid to U.S. manufacturers in developing export potentials. This includes an agreement with the Export-

Import Bank to consider loans for U.S. equipment and technical services on foreign atomic power projects, and announcement of the prices at which AEC will supply fuel to foreign reactors and will buy back the byproducts, plutonium and uranium 233.

• A contract with General Chemical Div. of Allied Chemical & Dye Corp. to produce refined uranium salts in private plants. This work is now done wholly in government plants.

• A go-ahead to private industry from AEC to build test reactors in which materials, parts, and equipment can be checked to see how they stand up under radiation.

• **Insurance**—One unsettled question is how power reactor stations can be insured. Republicans and Democrats agree that federal liability coverage is needed, since private insurance firms have a limit of \$65-million per accident. A catastrophe, however remote the possibility, could push claims far above this figure.

Last summer, a bill for \$500-million limits of federal insurance was rolling along until the Democrats were defeated on the Gore bill. Then they withdrew their support, and the bill died. Rep. Melvin Price (D-Ill.), a member of the joint committee, says he will reintroduce the insurance bill—but it will be tied with a new federal reactor-construction bill. Meanwhile, AEC is working on a bill that independently provides the insurance.

• **Completion Dates**—Earlier atomic projects are progressing toward completion dates that begin to look firm. After mid-1957, the Westinghouse-Duquesne Light Co. 60,000-kw. plant at Shippingport, Pa., is scheduled to start up. Strauss insists that this will be the first large atomic plant anywhere in the world built primarily for power production. England's Calder Hall plant (BW—Oct.27'56,p126), he says, gets power only as a byproduct of plutonium production for weapons.

Schedules for 1960 completion include the 180,000-kw. Commonwealth Edison Co. project in Chicago, Consolidated Edison Co.'s 160,000-kw. plant in New York, and Yankee Atomic Electric Co.'s 134,000-kw. plant at Rowe, Mass. Smaller projects are moving along, too.

However, the 100,000-kw. projects of a group led by Detroit Edison Co. has run into a snag. Three labor unions question the safety of the fast breeder reactor, which produces more fuel than it consumes, that is planned at Monroe, Mich. (BW—Oct.27'56,p120). AEC has scheduled public hearings on this question for Jan. 8.



TEACHER comes by television to these Pittsburgh schoolchildren who watch one of WQED's 163 classroom-directed programs.

TV Teaching Gets Set for Boost

Three years ago, Houston University's Pres. Walter W. Kemmerer opened his institution's noncommercial educational television station—the nation's first—with a modest (for a Texan) fanfare. Said he: "It could be the greatest thing since Gutenberg invented the printing press."

Late last week, National Broadcasting Co.'s Pres. Robert W. Sarnoff, in the rococo splendor of a Miami Beach hotel, announced the gift of \$300,000 worth of programs to the nation's non-commercial educational TV stations. Said he: "This service . . . will enrich the whole future of education by television."

NBC's service will consist of half-hour educational programs fitting into the wide categories of government, mathematics, and the humanities, and each "starring" a well-known name. James R. Newman, author-editor of "The World of Mathematics," has been signed up for the math lectures; conductor Eugene Ormandy may supervise the series on music. The idea is to turn out programs for informal adult education.

To many outside both education and broadcasting, Sarnoff's announcement was a surprise. They were startled not so much by NBC's largess as by the

idea that educational TV has a future or a strong enough present to digest NBC's gift. Since 1952, the peak year of heady optimism about the golden age that TV was going to bring to education, the most extreme boosters have gradually become silent. But meanwhile the number of the nation's noncommercial educational TV stations has increased from one in 1953, to 17 by the end of 1955, and to 22 this year.

• **Sprouting Quietly**—The growth has been going on quietly not just because the most valuable campaigners have fallen quiet. The chief reasons are that (1) the growth is steady, not spectacular, and (2) only four of the nation's 10 largest cities have educational TV stations operating.

For all this, there's \$40-million invested in noncommercial educational TV stations today, and plenty more is coming. NBC's gift—consisting of three half-hour live programs a week for 26 weeks—will probably speed further investment: Seven new noncommercial educational TV stations are now being built; their backers will likely speed up construction as much as possible to share the NBC programs, which start in March.

• **Change by TV**—With their \$40-million worth of equipment, programs, and

backing, the educational TV stations are beaming their programs to areas with a total population of 48-million people. Of course, their actual audience is much smaller, but just how small nobody knows for sure because no survey has been conducted. Nevertheless, the programs are having dramatic effects.

In Memphis, WKNO-TV went on the air only last June but has already begun changing the nature of the city. At last count, there were 50,000 illiterates in Memphis. Since June, WKNO-TV has been telecasting elementary courses in reading and writing. These go to 35 "viewing centers" where more than 700 adults are learning to read and write. This, say Memphis citizens, is a prime example of what educational TV can do—bring education to people who either couldn't or wouldn't get it elsewhere.

In Pittsburgh, WQED, which started telecasting in April, 1954, has been conducting courses for adults who weren't able to finish their high-school education. This year, 46—including 16 jail inmates—won their high school diplomas by TV. Today, more than 2,000 students are enrolled.

In Chicago, WTTW was quite unaware of the extent of its audience when a few months ago it telecast a

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Twenty-six machining operations are performed automatically on this huge transfer machine. To keep this machine operating continuously—to avoid costly production shutdowns—Baker Brothers, Inc., selected Allen-Bradley quality motor control—the control that would give them millions of trouble free operations.

Allen-Bradley solenoid starters and relays have only *one* moving part. There is almost nothing to go wrong. The double break, silver alloy contacts used on all Allen-Bradley controls require no down time for maintenance—they are always in perfect operating condition. The overload relays remain reliable, irrespective of time in service or operating conditions.

Specify Allen-Bradley—you cannot make a mistake!



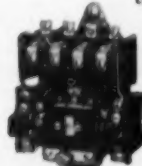
Allen-Bradley Co., 1332 S. Second St., Milwaukee 4, Wis.
In Canada—Allen-Bradley Canada Ltd., Galt, Ont.



Bulletin 802T Oiltight Limit Switch with Adjustable Lever. Saves installation time.



Bulletin 700 Solenoid Type Universal Relay. Contacts can be connected for either "normally open" or "normally closed" operation.



Bulletin 709, Size 1, Across-the-Line Solenoid Motor Starter.

less formal program on how to fill in a tax return, and asked its viewers to telephone their questions. It got 65,000 calls in the next couple of days.

In Houston, KUHT in its three years of operation, has telecast some 50 college courses for credit to more than 12,000 registered students.

• **Jelling Ideas**—Projects like those have been setting a foundation for educational TV. Says Ralph Steetle, executive director of the Joint Council on Educational Television, an organization made up of 11 educators' groups, "vague ideas about educational TV in many communities begin to jell as word of such accomplishments spread."

These same ideas prompt Dr. Franklin Dunham, chief of the radio-TV section of the U.S. Office of Education, to predict that some 45 noncommercial educational TV stations will be operating by the end of 1958.

• **Gifts for Living**—Business will likely have as big a hand in such growth as it has had in establishing the educational TV stations now operating. About \$11-million of the \$40-million currently invested in educational TV has come from business and industry. This year, when KUON-TV, Lincoln (Neb.) educational TV station, was being established, Fetzer Broadcasting Co. donated \$225,000 worth of equipment. Last year, St. Louis companies gave \$60,000 to meet part of the operating costs of the city's KETC-TV.

Most of the \$11-million that has come from companies has gone to the 11 educational TV stations that are run by community organizations. There

are two other types of stations: those run by universities or public school systems, and those run by state governments. (There are five in that last category; a net of three in Alabama, one in Oklahoma, and one in Louisiana.)

All of these have been getting heavy support from foundations. Grants also finance the work of the Educational TV & Radio Center at Ann Arbor, Mich. This organization is a clearing house and program production and exchange center for the educational TV stations. It has consulted with NBC over the material that ought to be provided in the \$300,000 worth of programs NBC will give to educational TV. It will also put up \$100,000 to rent loop cables that will connect the educational stations to NBC's network.

• **What Hurts**—For all these gifts, educational TV has its problems. Chief among them is one that hurts independent commercial TV operators, too: the slow development of ultra high frequency telecasting.

The Federal Communications Commission has reserved 258 TV channels for noncommercial educational TV. Two-thirds of these are UHF channels. And in major TV centers like New York, Philadelphia, Baltimore, Washington, and Los Angeles, where almost all telecasting is on very high frequency, educational TV has only UHF channels reserved for its use.

Los Angeles attempted to use its UHF channel. This brought the only failure educational TV has yet suffered. The station, operating in an area saturated by VHF, drew so small an

audience that it was forced to quit.

Five of the 22 educational stations now operating use UHF channels. "They can't stand the pressure, and they're crying for help," says George L. Hall, development director of the Educational TV & Radio Center.

• **Fading Threat**—For a while, during educational TV's slow progress, it seemed that commercial TV operators were ready to attack it while it was still feeble. Some complained that educational TV channels were "vegetating," that many were needed for commercial service.

Since then, the atmosphere has changed. One clear sign of this: Houston's KUHT this year received checks for \$10,000 from each of the three commercial TV outfits in the city.

But while the pressure from some commercial operators lasted, it actually helped educational TV. FCC hearing boards generally have turned down commercial operators seeking to use vacant educational channels—but they have also warned educational TV planners to get busy.

Other troubles, not so technical, can strike educational TV. In Philadelphia, WHYY-TV planned to start telecasting on Nov. 26. But it's still "testing." It intended to finance a large part of its operating cost with a grant from the Philadelphia Board of Education. Now the board says WHYY-TV will get no more than \$10,000 until a New York consultant firm surveys its management.

• **Where Are the Goals?**—Most of the rest of the nation's educational TV stations reckon themselves healthy. The 22 operating stations are telecasting about 700 hours of programs a week.

Costs vary widely. Chicago's station is a \$1-million job, has a yearly operating budget of \$450,000. Houston's cost \$300,000 to establish, runs on \$100,000 a year.

There's no room for generalizing about the programs educational TV beams out. Some concentrate on formal education. Next year, St. Louis' KETC will produce more than 250 programs that will be telecast to classrooms in the city's schools. And in Chicago, WTTW is telecasting a complete two-year junior college course for credit for 1,325 students.

Others are less formal. WHA-TV in Madison, Wisc., presents such programs as readings from Shakespeare and plays for children.

There's no wide agreement yet on which approach should get the major emphasis. That's because educational TV still hasn't defined its general goals.

Says the Educational TV & Radio Center's George Hall: "We have to carve out a whole new concept of programming. All of us engaged in educational TV are still attempting to determine and define our aims."



Shifts at Top Follow Pitt Consol Deal

George Love (above, left) was elected chairman of Pittsburgh Consolidation Coal Co. this week and replaced as president by A. R. Matthews (right), who was also elected a director. Matthews will continue as president of Pocahontas Fuel Co., Inc., the majority of whose stock Pitt Consol acquired re-

cently in an exchange. Love's headquarters will remain in Pittsburgh. Matthews will divide his time between Bluefield and Pittsburgh.

The stock deal added about 8-million tons to the 25-million tons already turned out annually by Pitt Consol, now even more the industry's leader.



Easily passes test. Frozen in an ice cake, this sintered plate nickel-cadmium battery easily starts the engine. Produced by Sonotone Corporation,

Elmsford, N. Y., rugged nickel-cadmium batteries are ideal power sources for aircraft ... trucks ... buses ... taxis ... motor boats, etc.

Even in solid ice, new nickel-cadmium battery doesn't "freeze up"

Don't confuse a nickel-cadmium battery with the conventional type you've known up to now.

The two are as unlike as a "naphtha launch" and a snappy new express cruiser. Take that battery in the picture . . .

Even frozen in ice, it packs energy to spare. Enough to start an engine more than 100 times without a single miss!

And that's not the limit of what it can do. This sintered plate nickel-cadmium battery shows plenty of zing whether the temperature skids to 40° below zero . . . or zooms to 135° above.

Nothing seems to hurt one. Leave it discharged and neglected . . . charge it fast . . . overcharge it . . . reverse charge it . . . and it comes through unharmed.

Its service life, too, is surprising. Run one down 1,000 times, recharge it each time — and you still have a battery that delivers *nine-tenths* of its original power.

As you might expect, some unconventional thinking preceded development of this battery. And unconventional materials — for a battery, at

any rate — went into it. Nickel plates, for example. Nickel inside connections. Stainless steel cases. Pretty unconventional, all of these ideas. But successful.

When you have a metal problem in which high or low temperatures, corrosion, wear, stresses or fatigue are factors, talk it over with us. We — and nickel — may be able to help you.

Write for "List A" of available publications. It includes a simple form that makes it easy for you to outline your problem for our study.

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In Business

• • •

ICC Grants Rail Freight Boosts; Examiner Urges Rise for Passengers

Rail rate boosts were boiling briskly in the Interstate Commerce Commission's pot this week.

Six major Eastern roads—including the Pennsy and the New York Central—will get a 15% jump in first class and 5% in coach fares, if the ICC follows the recommendation of its examiner in the case. The roads had asked for 45% on first class fares. Two other lines—the Reading and the Lehigh Valley—are in line for the coach boost alone.

Objections to the raise can be filed up to Jan. 17; the final ruling should come about 30 days later.

As for freight rates, the full ICC has approved a 7% raise for Eastern roads, and 5% for the Westerns—less holdowns on coal and other bulk commodities that shave the net increase by about 1%. The roads are expected to put the new rates into effect on Dec. 26.

Hearings have been set by the ICC for early next year on a request by the Eastern and Western roads for a 15% boost that they say should be in addition to the ones just granted (BW-Dec.1'56,p44). But ICC Chmn. Anthony Arpaia has said that the smaller request is included in the 15% (BW-Dec.8'56,p44). Whatever ICC may grant will probably be extended to the Southern roads.

• • •

Ice Cuts Off Great Lakes Iron Ore But Shortage Is Held Most Unlikely

Ice has clamped down hard on iron ore shipping in the Great Lakes, with the 1956 carry-down still about 10-million tons short of last year's 87.2-million tons. But the chances of an iron ore shortage are slim indeed; increased imports from abroad, and reduced consumption due to the steel strike are making up the difference (BW-Sep.1'56,p93).

This winter, U.S. Steel's Pittsburgh Steamship Co. had hoped to keep its big fleet of ore carriers moving beyond the usual mid-December deadline, and perhaps into January (BW-Dec.8'56,p44). But ice scotched that; the last ship left Two Harbors, Minn., this week.

• • •

FBI Jails Four; Says Ring Sold Oil Maps Purloined From Gulf

The FBI and officials of Gulf Oil Corp. this week were unraveling a tangled skein of theft involving a priceless industrial asset: information pinpointing new oil pools.

The story broke early this week when the FBI arrested four men on charges of transporting stolen property across state lines. The property: maps of the findings of Gulf's exploration crews.

It was rumored that as many as four Gulf employees might have been involved in the thefts.

Gulf itself smelled a rat last summer and finally called in the FBI. One report said the thefts may have been going on for five years.

Gambling losses of one or more employees are said to have caused the thefts of the maps, which were peddled at prices above \$500,000 by the men who secured them from Gulf. The FBI said that in some cases buyers of the maps knew of promising oil locations even before Gulf's own real estate department.

• • •

SEC Files to Break Up Oil Merger, Faces Setback in Paper-Lumber Deal

The first government antimerger case involving the oil business has been filed to break up Gulf Oil Corp.'s acquisition of Warren Petroleum Corp., big independent producer of natural gasoline and liquefied petroleum gas.

The Federal Trade Commission charges that Gulf's purchase of the company tends to create a monopoly in the sale of these two products. Warren's sales last year were about \$100-million. Gulf's answer is that the merger actually puts Warren in a better position to compete with other integrated companies.

On the other hand, FTC lost out in its attempt to "freeze" International Paper Co.'s merger with the Long-Bell lumber companies (BW-Nov. 17'56,p44). A U.S. Court of Appeals denied FTC's request that International be ordered to stop further "integrating, consolidating, or disposing" of Long-Bell assets until FTC completes its hearing on its complaint against the merger. FTC has no authority to get a court injunction to stop an impending merger, such as the Justice Dept. has.

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Business Briefs

The massive effect of institutional investors on the stock market has come under the economist's scrutiny at last. Next week the Senate Banking Committee will release Dr. Asher Achenstein's 291-page study, *Institutional Investors and the Stock Market, 1953-1955*. Achenstein has turned his microscope on the market activities of such groups as life insurance companies, corporate pension funds, and investment trusts.

The Arkansas Power & Light Co., frustrated for two years in demands for rate increases (BW-Apr.21'56,p36), was finally granted an extra 2 mills per kwh. this week by the state Public Service Commission. The rise applies to residential and small commercial users; the PSC is still studying rates paid by big users.

The University of Michigan is setting up its first venture in cooperative education, using a gift of land and money valued at around \$10-million from the Ford Motor Co. and the Ford Motor Co. Fund. The new Dearborn Center will enroll college and graduate students of business and engineering for alternating three-month periods of study and jobs in industry.

**How Will Your Company Fit Into This
\$12 BILLION
Home Furnishings
Market?**



Home-loving Americans will boost their purchases of furniture and furnishings from a current level of less than \$8 billion a year to an estimated \$12 billion a year by 1965.

This trend offers impressive opportunities for manufacturers of all types of household goods, such as furniture, china, glassware, cooking

utensils, floor coverings, gardening tools and 'do-it-yourself' equipment.

Profitable operation and growth for corporations in these fields necessitate a close relationship with an experienced commercial bank such as The Bank of New York. Our senior officers are readily available to discuss your requirements.

THE BANK OF NEW YORK

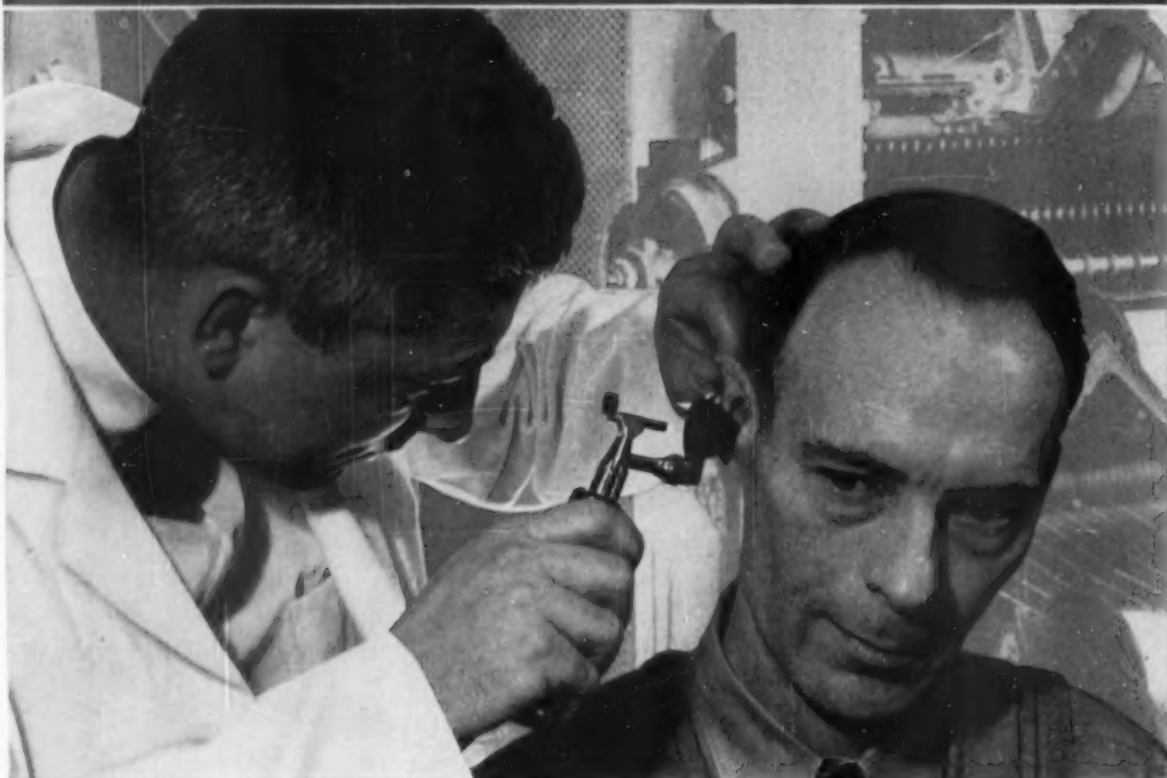
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(Temporary During Construction)

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LIBERTY MUTUAL

The Company that stands by you



How sick can 350 employees be?

**(A LIBERTY MEDICAL PROGRAM
SAFEGUARDS HEALTH)**

It's been found that well run *in-plant medical programs* will not only reduce Workmen's Compensation costs, but also cut absenteeism, labor turnover and Group Insurance losses. Recently a New England plant had Liberty Mutual specialists help them establish an in-plant program. First benefit to the 350 workers was a health check-up. The Medical Director found some way to help every one of them. Where medical treatment was indicated, he referred them to their family physicians. Many potential disabilities were nipped in the bud. This was an exceptional situation, but statistics show that 60% of the average group of employees needs some medical attention. That's why Liberty's comprehensive Medical and Health program is so very important in reducing the cost of compensation insurance.



DOCTORS AND NURSES WHO SAVE YOU MONEY. Liberty Mutual's Loss-Prevention Medical Staff of physicians and nurses specialize in setting up in-plant medical programs. It's a very important step in cutting your compensation costs.



ANY SIZE COMPANY CAN BENEFIT through Liberty's 4-phase medical and health program and dividend policy. In-Plant Medical Service, Industrial Hygiene, Medical Advisory Service and Rehabilitation control losses, help achieve low net cost.



INSURANCE FOR:
WORKMEN'S COMPENSATION, AUTOMOBILES,
LIABILITY, FIRE, GROUP ACCIDENT AND
HEALTH, MARINE, CRIME

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
DEC. 22, 1956



Congress will be slow starting in January. Here's why:

It's a new session. The House reorganizes every two years. This means that all committees are set up anew. Custom is that sitting committee members are reappointed, if they wish their old assignments. But there's always lots of shifting—upgrading of old members and the placement of new ones. This takes time.

The Senate is a different proposition. It's a "continuing" body, but election year changes in membership bring shifts.

All legislation must start afresh. All bills, no matter how far along they were when Congress quit, have to start over. That means reintroduction and new hearings before the legislative committees.

Pres. Eisenhower will be late with his program. Usually, a President's message on The State of the Union is sent within a day or two after Congress meets. But Eisenhower won't send up this message, which will stake out goals for his second term, until a week later—Jan. 10. This delay, officials explain, is to give Congress a chance to organize and give the Administration the benefit of latest Middle East developments in writing foreign policy for the years ahead.

—•—

Some facts to have in mind, as the Democrats organize Congress.

The House division is fairly close: 233 Democrats, 201 Republicans, and one vacancy. The party division is about the same as this year.

The Senate is nip and tuck—49 Democrats, 47 Republicans. That's the same as in the past session. But the elections took out some old Senate members and brought in a few new faces. These will show in organization.

Democrats will organize both chambers. This will give them the committee majorities and the committee chairmanships.

And the Democrats will hold the power to investigate. They will use it—especially in 1958, when the next Congressional elections come around. The aim will be to embarrass Eisenhower in the hopes that this will add to Democratic House and Senate majorities and set up a 1960 victory.

Note how daily news stories speculate on a Senate upset—a split that would give the GOP control. We think chances of this should be discounted. Lausche, the new Democratic senator from Ohio, is not likely to bolt his party on organization. But deaths could change Senate lines, and give the GOP a thin edge—enough to take control during the session.

—•—

Here's how the key committees will stack up:

On taxes and tariffs: The House Ways & Means Committee will remain the same. It suffered no November casualties. And, on the Democratic side, this is the committee on committees—it picks members for other committees.

You can anticipate legislative stands. The Democratic majority will favor tax cuts, for the lower brackets. But it won't force the tax issue next year. The showdown will come in 1958, the next election season.

On tariffs, Democratic leaders will talk up free trade, back the ideals of former State Secy. Hull. But when the chips are down, you will see a lot

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
DEC. 22, 1956

of party splitting, particularly among Southern members from newly industrialized districts.

Keep an eye on Wilbur Mills of Arkansas. He's a key Democrat on the House Ways & Means Committee. In the last session, it was Mills who put through the liberalized retirement program, especially for women. This session, Mills will turn his attention to taxes. He won't push for cuts but will try to close so-called loopholes.

You will hear new voices on foreign affairs.

Sen. George retires next month—leaving the chairmanship of the Senate Foreign Affairs Committee.

Democrat Green of Rhode Island will take over. He is 89 years old but still vigorous. The second man on the committee is Fulbright of Arkansas. He may turn out to be the man who directs the committee.

House foreign affairs will be under a new chairman—Gordon of Illinois, who succeeds Richards of South Carolina. Under Gordon, the committee will favor foreign aid. But it will be less cooperative with the Administration on foreign trade policy.

Banking legislation will have new influences. On the House side, two conservatives will be missing—Wolcott of Michigan and Gamble of New York. Wolcott was a rugged opponent of public housing. With tight credit looming as a 1957 issue, it will be hard to guess the House committee with these two members gone. It may well be that the controversy over credit policy will center in the Joint House-Senate Economic Committee, where Rep. Patman (D-Tex.) holds a key spot. Patman is an easy-money man.

There will be a real fight in the House Rules Committee. The defeat of Rep. Ellsworth of Oregon left a GOP gap. The Rules Committee decides what legislation reported out by the regular legislative committees shall come up on the House floor, so it's a powerful committee. Odds are that the GOP will fill the vacancy with a Westerner. This could change things, where reclamation and power issues are involved.

On farm legislation, no big changes are in sight. The House chairman will be Cooley of North Carolina. But the long-time GOP spokesman, Hope of Kansas, will be missing. Andresen of Minnesota will step up.

— ■ —
Note the build-up of Vice-Pres. Nixon.

He talked foreign policy a few weeks ago—sent up a trial balloon for the White House on the Middle East.

His trip to Austria is for the President—sanctioned by Eisenhower.

New assignments are ahead for Nixon. He will be a key man, maybe the chairman of the Administration's Coordinating Committee. This is the group that sees to it that decisions of the National Security Council—the top policy group in Washington—are carried out by other government agencies.

Is Eisenhower tapping Nixon to be his successor when the 1960 Presidential elections roll around? No one knows the answer. But it is a fact that the Vice-President's assignments point to a strong party position four years hence. Nixon's activity will also bring stronger Democratic attacks.



How to get shipments off to a fast start and finish ... with RCA 2-Way Radio

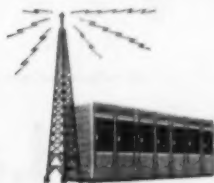
Shipments via Railway Express Agency take off for their destination sooner, arrive earlier, with the help of RCA 2-Way Radio. Strategically located dispatchers are able to keep in instantaneous and constant touch with delivery trucks en route, controlling their movements with maximum efficiency. With RCA 2-Way Radio unnecessary mileage is eliminated, delays are minimized, customers are better satisfied. In some cases, pick up and delivery time has been slashed up to 50 per cent!

Whatever type of rolling stock you operate, you can control it better and faster with RCA 2-Way

Radio. Employees and customers alike appreciate its time-saving, money-saving efficiency. And customers respond to the improvement in service with repeat business that often pays for the equipment!

RCA 2-Way Radio requires a minimum of maintenance and operating cost. Like all RCA products it's built for rugged, reliable duty by the world leader in electronics.

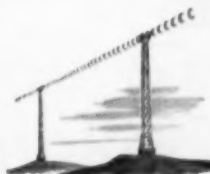
For free booklet on the profitable uses of RCA 2-Way Radio, or for information on other RCA electronic products, write Dept. MD-26, Radio Corporation of America, Commercial Electronic Products, Bldg. 15-1, Camden, N.J.



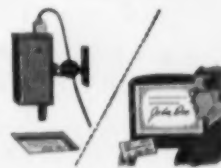
RCA Broadcast Transmitters have set the pace for over 25 years. Today, many TV and radio stations are RCA-equipped ... with everything from microphone to antenna.



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RCA Microwave provides point-to-point communication by radio signals. For pipelines, railroads, utilities, government agencies and other qualified users.



RCA Industrial TV watches plant processes, protects property, verifies bank signatures. TV cameras go where it's too hot, too dangerous or impractical for personnel to go.

RADIO CORPORATION OF AMERICA

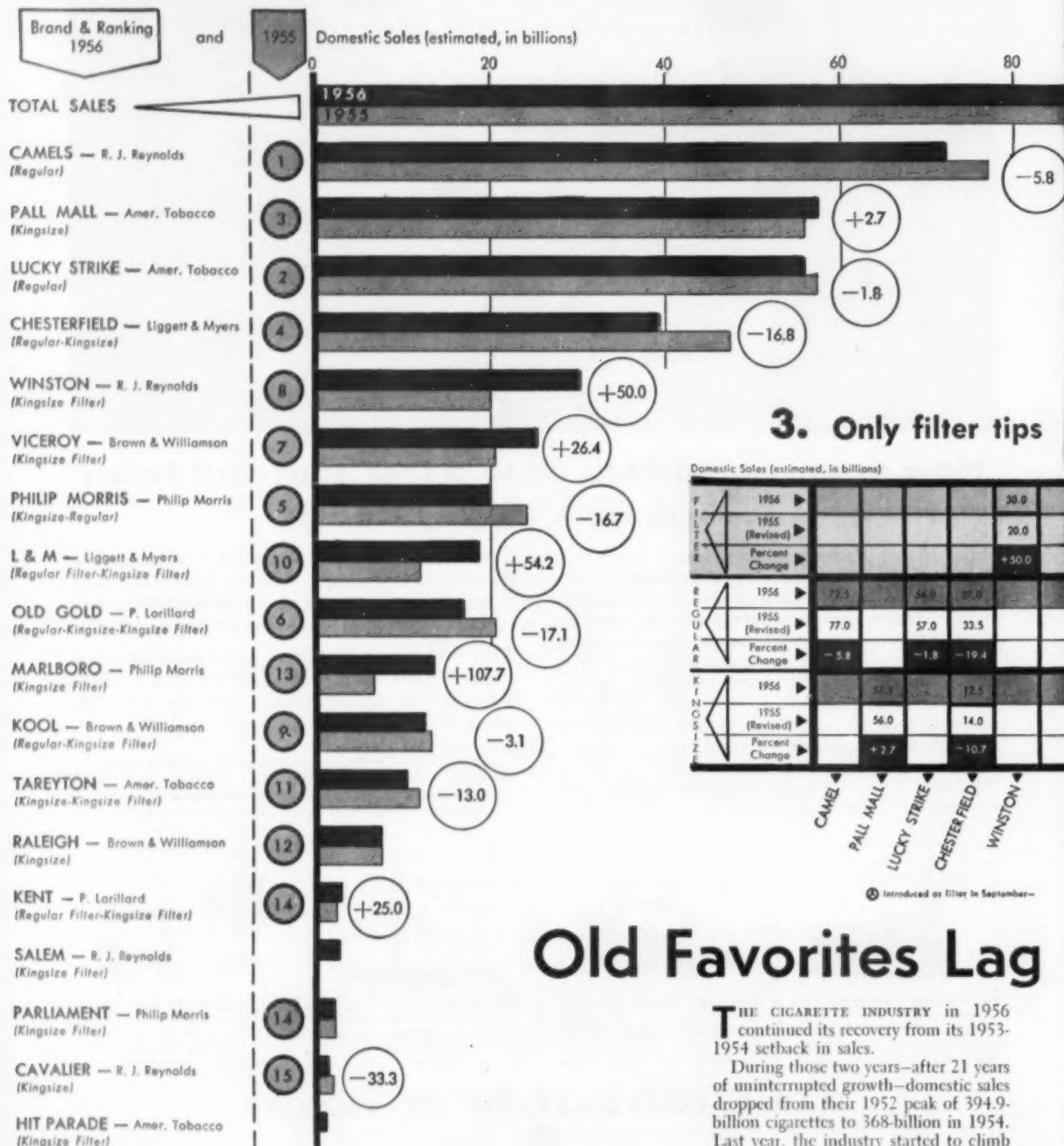


Tmk(s) ©

MARKETING

Cigarettes in 1956: More Sales... and More

1. Steady increase of filters cuts into others' share



3. Only filter tips

Domestic Sales (estimated, in billions)

| F I L T E R | 1956 | | | | 30.0 |
|-----------------|----------------|------|------|-------|-------|
| | 1955 (Revised) | | | | 20.0 |
| | Percent Change | | | | +50.0 |
| R E G U L A R | 1956 | 72.3 | 54.0 | 27.0 | |
| | 1955 (Revised) | 77.0 | 57.0 | 33.5 | |
| | Percent Change | -5.8 | -1.8 | -19.4 | |
| K I N G S I Z E | 1956 | 57.3 | | 12.5 | |
| | 1955 (Revised) | | 56.0 | 14.0 | |
| | Percent Change | | +2.7 | -10.7 | |

CAMEL
PALL MALL
LUCKY STRIKE
CHESTERFIELD
WINSTON

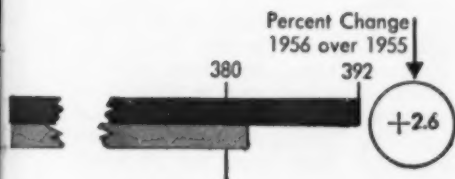
Ⓢ Introduced as filter in September—

Old Favorites Lag

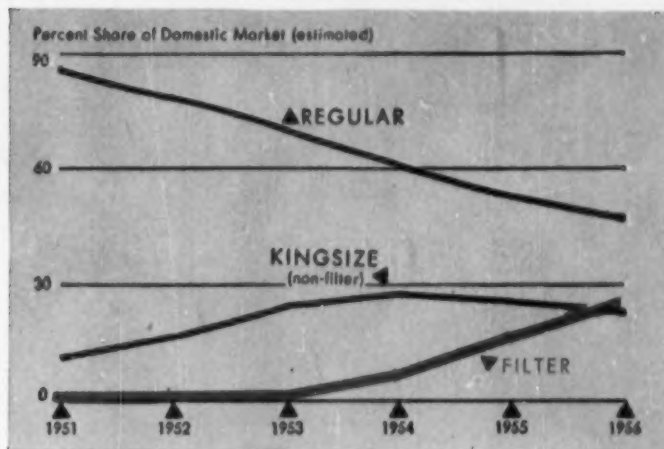
THE CIGARETTE INDUSTRY in 1956 continued its recovery from its 1953-1954 setback in sales.

During those two years—after 21 years of uninterrupted growth—domestic sales dropped from their 1952 peak of 394.9-billion cigarettes to 368-billion in 1954. Last year, the industry started to climb

Switching to Filters



2. Others lose as filters make steady increase



(except PM) make sales gain

| | | | | | | | | | | | | |
|---------|---------------|-------|----------|----------|-------|----------|---------|-------|-------|------------|----------|------------|
| 25.4 | | 18.5 | 4.5 | 13.5 | 2.0 | 4.0 | | 2.5 | 2.3 | 2.0 | | 0.5 |
| 20.1 | | 12.0 | 4.5 | 6.5 | | 4.0 | | 2.0 | | 2.0 | | |
| +26.4 | | +54.2 | | +107.7 | | | | +25.0 | | | | |
| | 14.0 | | 9.5 | | 7.5 | | | | | | | |
| | 17.0 | | 12.0 | | 8.5 | | | | | | | |
| | -17.6 | | -20.8 | | -11.8 | | | | | | | |
| | 4.0 | | 3.0 | | 2.8 | 6.0 | 7.1 | | | | 1.0 | |
| | 7.0 | | 4.0 | | 4.2 | 7.5 | 7.1 | | | | 1.5 | |
| | -14.3 | | -25.0 | | -33.3 | -20.0 | | | | | -33.3 | |
| VICEROY | PHILIP MORRIS | L&M | OLD GOLD | MARLBORO | KOOL | TAREYTON | RALEIGH | KENT | SALEM | PARLIAMENT | CAVALIER | HIT PARADE |

● Introduced in May — ○ Introduced in August.

4. Companies' market shares change, but rankings don't

| Domestic Estimated Percent Share | | | |
|----------------------------------|------|----------------|------|
| Company | 1954 | 1955 (revised) | 1956 |
| American Tobacco Co. | 33.4 | 32.5 | 31.6 |
| R. J. Reynolds Tobacco Co. | 25.1 | 25.8 | 27.0 |
| Liggett & Myers Tobacco Co. | 16.3 | 15.6 | 14.8 |
| Brown & Williamson Tobacco Corp. | 9.4 | 10.4 | 11.4 |
| Philip Morris | 8.7 | 8.5 | 9.0 |
| P. Lorillard | 6.5 | 5.9 | 5.0 |
| All Others | 0.6 | 1.3 | 1.2 |

Data: Full Year Estimates Based on Nine-Months Data.

©BUSINESS WEEK

in the Race for Smokers' Market

back. This year, with total domestic sales of 392-billion cigarettes, companies racked up a 2.6% gain over 1955 (charts), according to the annual survey made for BUSINESS WEEK by Walter E. Knight, research director of the Louisville (Ky.) Chamber of Commerce. The figures are based on nine months' sales,

with estimates for the last three months of the year. When you add to the tax-paid domestic output another 30-billion tax-free cigarettes for export, you have a total production for the year of 422-billion cigarettes.

Behind this gain are intensive industry sales efforts and stepped up compe-

tition between makers. These factors show up in such developments as the appearance of new brands to compete for consumer acceptance, face-lifting operations on established makes, and revamped packaging.

Other highlights of the year include:

- For the fourth straight year, the

Whether you move materials from car to truck, from mine to tippie, or from point A to point B — a Barber-Greene Conveyor can do it faster and cheaper.



Hauling more material for less money

Thousands upon thousands of applications prove that belt conveyors move bulk materials with less horsepower, less maintenance and less cost than any other method.

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Literature on request

CONVEYORS...LOADERS...DITCHERS...ASPHALT PAVING EQUIPMENT

sale of regular size cigarettes dropped, with all brands sharing in the loss. Regulars dropped from 206-billion last year to 187.5-billion this year, a 9% decline. Heaviest losers were Liggett & Myers Tobacco Co.'s Chesterfield, down 5.5-billion; R. J. Reynolds Tobacco Co.'s Camel, down 4.5-billion; and Philip Morris' Philip Morris, down 3-billion.

- The drop in sales of plain (non-filter) king-size cigarettes gained momentum. Over-all, plain kings fell from 103.6-billion last year to 97.4-billion this year. But in the face of this general drop, American Tobacco's plain king, Pall Mall, nosed out its stable mate, Lucky Strike, to take second place in sales among all brands. Pall Mall showed the only sales increase among the plain kings.

- It was another big year for filter cigarettes. Sales jumped from 72.8-billion last year to 107.1-billion this year, a gain of about 47%.

- For the first time, more filter cigarettes were sold than plain kings. And filters were strong enough so that, even with the drop in plain kings, this year for the first time, these two types of cigarettes accounted for over half of all cigarettes sold.

- **Brandwise**—The year saw little change in relative standing among brands as a whole. Camel, even with its substantial decline, held its market lead, its position since 1950 when it pulled ahead of Lucky Strike. The big four, Camel, Pall Mall, Lucky Strike, and Chesterfield, this year accounted for 57% of all cigarettes sold. This compares with 80% for the top four six years ago.

In explaining Pall Mall's rise to second place, American Tobacco points out that the brand early established itself as the leading king-size cigarette. Pall Mall has shown a sales gain every year since American acquired it in 1948. This strong consumer acceptance probably explains why Pall Mall was able to buck the trend away from plain kings this year.

- **Filters Gain**—The fact that filters are moving up the scale explains most of the other movements in over-all rank among brands. R. J. Reynolds' Winston, for example, rose from eighth place to fifth, Viceroy from seventh to sixth, L&M from eleventh to eighth, and Marlboro from thirteenth to tenth. This pushed brands like Philip Morris, Brown & Williamson Tobacco Corp.'s Old Gold and Kool, and American Tobacco's Herbert Tareyton farther down the scale.

The year confirms the strength of the trend toward filters, and bears out the industry view that filters are here to stay. From a negligible 0.8% share of the market in 1951, filter sales this year total 27.8% of all cigarettes sold.

The filter type of cigarette chalked



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WHEN YOU GIVE a miniature radio for Christmas it will recall your thoughtfulness for many Happy New Years. It will be a continuing source of joy wherever it is taken.

You can add extra thoughtfulness to your gift by being sure the radio is equipped with Mallory Mercury Batteries. These batteries—entirely different from the conventional type—compress incredible life in small space, last far longer in use or in storage, give steadier power, *actually cost less to operate!*

Mallory pioneered mercury batteries to provide complete dependability and exceptionally long life in midget size—for portable radio sets, pocket recorders, easily concealed hearing aids. Now, teamed with tiny transis-

tors, they have helped make possible many exciting new electronic products in miniature size.

The mercury battery is another Mallory first—a development so important that it has set new standards of quality for the dry battery industry. It is a notable addition to the precision products which have resulted from creative Mallory engineering in the fields of electronics, electrochemistry and specialized metallurgy.



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up its first big sales increase in 1953, the year that possible injurious effect from smoking loomed in the public's mind. A government survey indicated that during 1953 and 1954, some 1.5-million people quit smoking. Apparently, many turned to filters to quiet their concern over the health factor. Just where filter sales will level off is a question nobody in the industry is ready to answer. One company spokesman predicts that next year filters may take some 40% of the cigarette market.

• **"Plains" Suffer**—Looking at the increase in filter sales—along with the declining plain king-size market—it appears that smokers who wanted longer cigarettes, as well as those who were attracted by the claims that kings were milder, are turning to filters, which offer the same advantages. (Only one or two filter brands are regular size.) For example, in 1953 and 1954, in the face of an over-all decline in cigarette sales, both plain kings and filters registered gains. But the plain kings led filters by a substantial margin. This made it easier for makers, since plain kings, unlike the filters, don't require special machinery to manufacture. But last year, as smokers decided they liked filters, plain kings dropped a bit. This year, plain king sales were off 6%, and for the first time more filters than plain kings were sold.

All plain king brands showed losses, except Pall Mall—up 2.7%—and Raleigh, which just held its own.

• **New Problem**—Shifting consumer tastes bring tobacco companies problems. For one thing, as each company tries to hedge its bets, it brings out a plain king and a filter. This means more brands to promote. One problem has been whether to market the new brands under an established brand name, or to launch it under a new name.

This year there is some evidence that consumers prefer the new brand with a different name. The four leading filters this year are sold under their own brand name. P. Lorillard sells three types of cigarettes under the Old Gold label. Its filter was one of the three that just held its own, instead of sharing in the general gain. Tareyton, which is also sold as a plain king, Herbert Tareyton, similarly failed to gain.

• **New Entries**—This year, nobody wanted to be left behind in the filter race. In addition to promoting old brands, companies introduced several new makes, all filters.

In May, R. J. Reynolds, which has a successful filter in its Winston, brought out Salem, a combination filter-men-tholated cigarette. By yearend, Salem had racked up 2.6-billion sales. Later in the year, Brown & Williamson added a filter tip to its king-size Kool, giving the market a second brand of filter-

menthol cigarette. In four months, filter Kool sold 2-billion units.

Another important filter showed in August, when American Tobacco Co. decided its Tareyton, a filter companion to plain king Herbert Tareyton, wasn't slicing a large enough share of the filter market. American introduced a filter, Hit Parade, with a name all its own. Hit Parade sold half a billion cigarettes, with incomplete national distribution. By yearend, the brand had achieved national coverage.

Philip Morris decided to aim Parliament at a broader market. It put the filter in a flip top box, to sell at a slightly lower price. This made almost a clean packaging sweep for Philip Morris. All its products are now sold in flip-top boxes, except regular Philip Morris (BW—Aug. 25 '56, p92). This type of packaging was a big factor in the success of the company's filter, Marlboro, introduced last year.

• **Nosing Up**—In the filter sweepstakes this year, Reynolds' Winston continued its sensational gain. On the market for nine months in 1954, Winston grabbed off second place, held it last year with a 13-billion increase, and this year jumped from 20-billion to 30-billion units. This put it at the top of the filter class, displacing Brown & Williamson's Viceroy, the long-time leader. Liggett & Myers' L&M, with a sales increase of 54.2%, held on to third place for the third year in a row. Fourth place went to Philip Morris' Marlboro, which had a big unit gain, and the largest percentage gain. It jumped from 6.5-billion to 13.5-billion, a change of 107.7%.

Last year, P. Lorillard's Kent and Philip Morris' Parliament were the only filters to lose sales from the year before. This year, Kent added a 25% increase, and Parliament held its own. Both brands were reduced in price during the year to compete with more popular priced makes.

• **Earnings**—Throughout all this activity, the standing of the various companies remains the same, though there has been some change in market share. R. J. Reynolds, Brown & Williamson, and Philip Morris all increased their market shares. Each company has a big selling filter:

Here's how earnings stack up:

| Company | Earnings per Common Share | |
|-------------------------------|------------------------------|--------|
| | 1955 | 1956* |
| American Tobacco Co. | \$7.45 | \$7.53 |
| Liggett & Myers..... | 6.46 | 6.67 |
| R. J. Reynolds Tobacco Co. .. | 5.05 | 5.56 |
| Philip Morris | 3.63 | 3.96 |
| P. Lorillard..... | 2.07 | 1.89 |

* Estimated.

As for leaf, the burley marketing season gets under way with indications that growers will gross over \$300-million this year. Opening bids average \$60.07 per 100 lb., a record for Kentucky prices. **END**



New right arm of rail and rubber for Shippers!

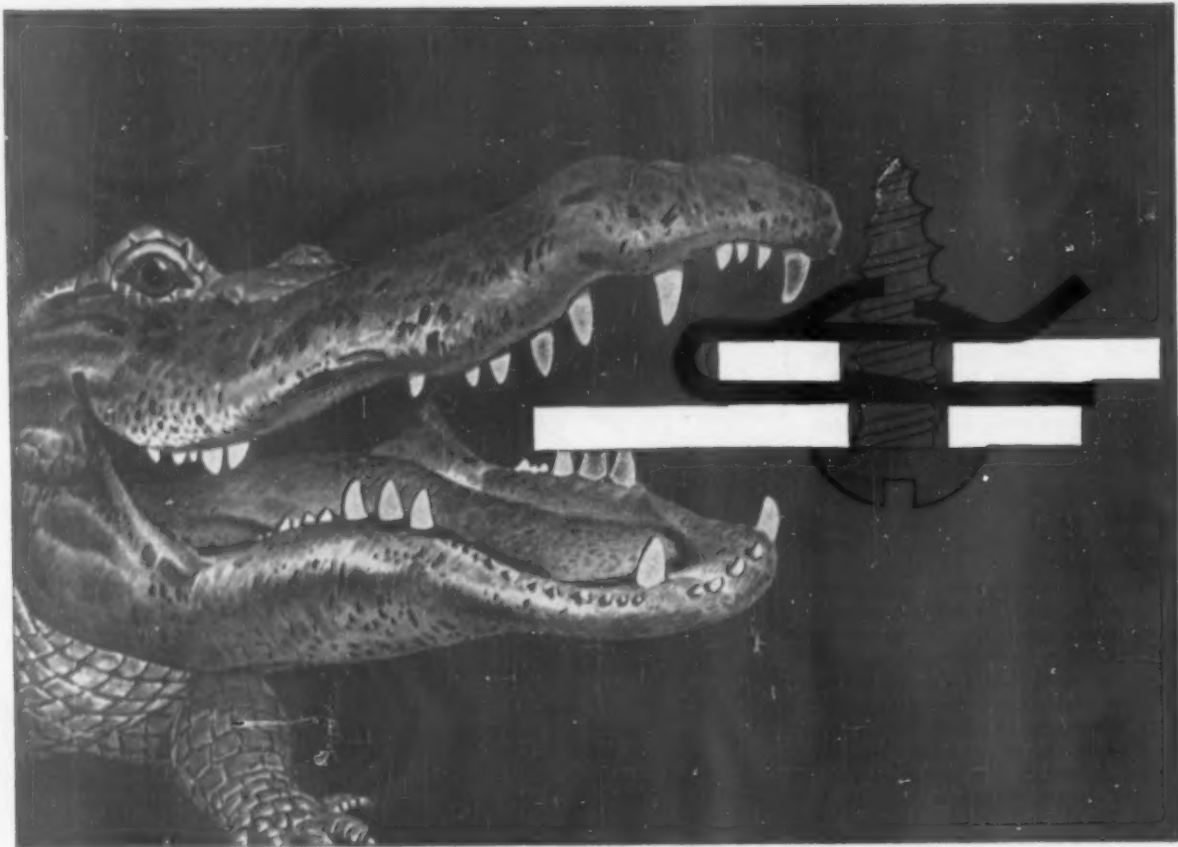
➔ B&O trailer-on-flat-car freight service "arms" your distribution plans with dependable flexibility. TOFCEE trailers pick up your freight load *where it is*. Trailers ride on fast freights that maintain all-weather schedules on hauls up to a thousand miles and more. TOFCEE loads ride right off cars and roll to consignee's plant or warehouse.

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STEEL JAWS THAT NEVER RELAX fasten a fastener in place

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When combined with the familiar Tinnerman SPEED NUT, this unique fastening principle provides a one-piece, self-locking, self-retaining fastener that is fast and easy to apply. The "U"

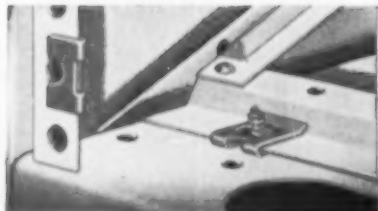
or "J" feature can be combined with wire and tube retainers, latches, catches and a host of other fastening requirements to save time, material and production costs.

Find out about these and more than 8,000 other types of SPEED NUT brand fasteners now serving industry all around the world. They can make important savings for you, can also simplify your assemblies. See your Tinnerman representative soon or write to us. **Tinnerman Products, Inc., Box 6688, Dept. 12, Cleveland 1, Ohio.**

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Speed Nuts

FASTEST THING IN FASTENINGS®



Greater flexibility for control equipment enclosures is provided by self-retaining "J" type SPEED NUTS at 30% less production cost.

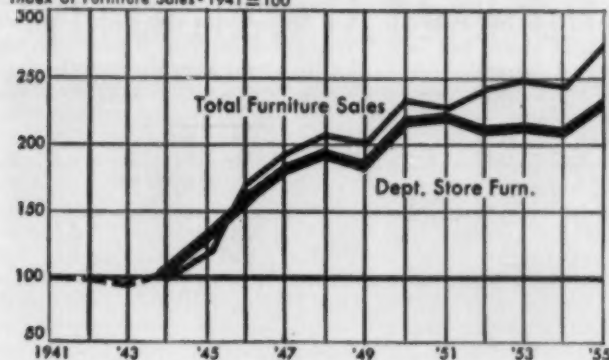


Assembly costs on this sheet-metal skylight frame are reduced 60% by Tinnerman "U" type SPEED NUTS.



Gas range assembly costs are reduced 25% to 50% by using Tinnerman "U" and "J" type SPEED NUTS.

Index of Furniture Sales-1941=100



The Problem:

Department stores' share of furniture sales is **dwindling**

Data: Dept. of Commerce, Federal Reserve.

The Solution:

A new line to fit the wants and needs of the biggest furniture buying market



Design to Sell Furniture

The widening gap in the chart above tells its own story. Department stores are lagging as an outlet for furniture. With furniture sales up sharply since the war, the big stores have seen their sales volume go up, but at the same time they are getting a smaller share of the total business.

Department stores have realized this for some time. While some big stores have done an outstanding job in furniture—especially on the East and West Coasts—the average department store has been rather faint-hearted in its furniture merchandising.

Now Perry Meyers of Perry Meyers, Inc., research consultant and one-time economist for Allied Stores Corp., has ferreted out some documentation of this trend—and the reasons for it.

His findings had an effect rather extraordinary in the history of market research. Usually, it's the client that tries to remedy any weaknesses a marketing study shows up. This time it was the analyst. Meyers—with a group of associates—is now head over heels in the furniture business. Ever since the High Point market in October, he and his cohorts have been hectically coordinating a

furniture merchandising program for a new line, marketed under the Young Family, Inc., label (pictures). Young Family's object is to plug a hole Meyers believes he discovered in department store merchandise.

I. The Research

It all started several years ago when a department store asked Meyers to look over its operation, find spots that needed strengthening. His immediate observation was that furniture was slow. The figures backed up this observation. He

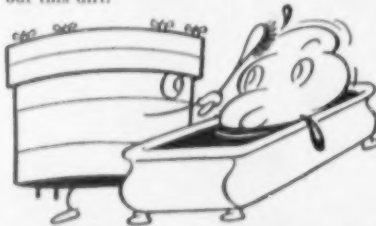
AIR-MAZING FACTS

BY G. SOGLOW

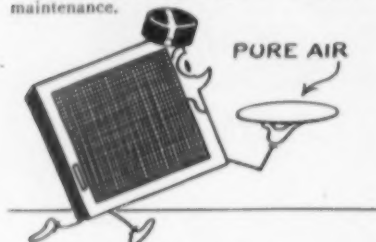


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CALL FOR CLEAN AIR. Air-Maze panel filters keep hotels cleaner, guests happier with plenty of clean, fresh air. And, Air-Maze all-metal cells are so easy to clean, provide high efficiency, low pressure drop. Ideal for hospitals, office buildings and stores.

FOR ENGINES, COMPRESSORS, AIR-CONDITIONING AND VENTILATING EQUIPMENT, or any device using air or liquids—there is an Air-Maze filter engineered to solve each filtering problem. Representatives in all principal cities will gladly show you how. For condensed product catalog, write Air-Maze Corporation, Cleveland 28, Ohio.

AIR-MAZE

The Filter Engineers

AIR FILTERS • SPARK ARRESTORS • LIQUID FILTERS
SILENCERS • OIL SEPARATORS • GREASE FILTERS

deducted chain and mail order sales from official figures, came up with this estimate: Department stores had only 9% of the national furniture sales—against 20% of china and glassware sales; 23% of ready-to-wear, and 27% of women's accessories.

• **Age and Taste**—Next, Meyers, made a sample survey of furniture customers in seven cities. Here he found that for the past two years 71% of the women under the age of 30 had bought furniture. Only 30% of the family homemakers over the age of 50 had made such a purchase. This wasn't surprising. Young families, outfitting new homes, are bound to dominate this market.

His survey confirmed another suspicion. The young buyer—who makes up the biggest market numerically—prefers modern or contemporary design. Over 60% of the women interviewed who were under 30 cast their vote for modern; only about 20% of those 50 and over preferred it. In traditional or 18th century, the line of preference ran in the opposite direction.

• **Income Factor**—When it came to income, almost half the market in the \$4,000 to \$7,500 income group liked modern furniture. On the other hand, in the \$10,000 and up category, only slightly over one-quarter liked modern. This follows naturally enough; the young buyer is more often in the moderate-income group. Yet department stores were finding half again as many furniture buyers among the 50-and-over customers than they were in the 30-minus.

• **Plugging the Gap**—By this time, Meyers felt he had his case: Department stores were missing a big bet because they weren't offering contemporary furniture at prices the biggest-buying market could afford.

The stores were impressed, but retorted: Where can we find a supplier big enough to keep us in business? Most companies that make contemporary are small, and can't meet a big store's demand. And well-designed contemporary comes high.

So Meyers set off on his own do-it-yourself operation.

II. Young Family

Young Family, Inc., was born in June, 1956. Its president is Frederika Fox, who has served on various shelter and women's magazines. Design coordinator is Barbara Lewis, and Robert Monroe is stylist. Perry Meyers and his wife Donna Meyers (formerly associated with Bon Marche in Seattle), and John Heyman, sales coordinator, make up the rest of the team.

Young Family is not the first concern to try to meet the gap in good contemporary furniture at reasonably low prices. Paul McCobb (BW-Oct. 20'56,p125) had just such an aim in

mind, and there have been others. But Meyers feels that even McCobb's Young Planner group is priced too high for the young people's pocketbook.

• **The Suppliers**—For suppliers, Young Family turned to some well-established concerns. The giant in the field—Kroehler Mfg. Co.—was interested, made some pieces for the line. Other suppliers today are Basic-Witz Furniture Industries, Craft Associates, Modern Upholstered Chair Co., Martinsville Novelty Corp., Gallo Original Iron Works, Inc. To round out the line, Cabin Crafts-Needletuft designed some rugs; Oxford Lamp Co. and Argo Lamp Co. filled out with lamps. In all, there are some 60 pieces in the Young Family line.

Young Family designers set up the general style concept and the general price range, worked out the details of style and price with the individual manufacturers. Since the line was to appeal to a broad market, it steered clear of the ultrapure contemporary look, avoided what some call the "anaesthetic severity" of some of the highly styled lines. And since it was to appeal to a limited-income market, production efficiencies were kept firmly in mind.

By October, Young Family was ready for its first showing, at the High Point market. By last week, 55 customers had signed up, with more coming in every day. Company members expect to sign up 100 more at the January market.

• **Merchandising Setup**—Young Family does no selling; the individual producers take care of this. Young Family collects royalties from the furniture sold. Its job is to help the stores merchandise the line.

Stores get the line on a strict franchise basis; in most cases, only one store may carry it in a city. This is an answer to an ever-growing pressure from the stores for "exclusive" lines, something they can talk about and promote. The store pays no franchise fee, but it does agree to invest a specified amount in the furniture, allow it a certain amount of display space, and to carry a fair representation of the line.

• **Realistic Prices**—Prices are severely realistic. At retail, lounge chairs run from \$45 to \$100; sofas and sleepers from \$125 to \$225. A 60-in. chest costs \$120. Dining tables run from \$60 to \$100.

• **Wrong Takers**—On one point, though, the venture has not succeeded entirely. Some big department stores have bought the line—Lit's in Philadelphia, Macy's in San Francisco, among others. But, says Meyers, "We really haven't changed anything. We designed the line with the department store's needs in mind. But mostly it's the smaller store that is buying it." **END**

What's NEW in Mechanization?



"Yes, we have banana stalks!"

Banana stalks don't burn, so they have to be hauled to a dump. The easy answer is a Jeffrey grinder which chews them up as fast as they're stripped—together with crowns and waste fruit—and flushes them down the sewer. Housekeeping is made easier, valuable warehouse space and labor are saved, soon paying for the Jeffrey grinder.



When two communities team up to plan and construct a sewage treatment plant, as Campbell and Kenton counties did here at Bromley, Kentucky, both profit. A larger, more efficient plant results and operation is concentrated under a single head. This cooperative idea is gaining rapidly; Jeffrey engineers are working similarly with other groups. Their broad experience covers all kinds of treatment needs and Jeffrey equipment can be depended upon to perform well and faithfully.



"Build your own" has hit many plants with needs for special conveyors. Factory engineers lay out systems to meet exact requirements. Then they select standard Jeffrey chain, fittings and sprockets, belt idlers and accessories accordingly. On many of these items they get immediate delivery from Jeffrey distributors.

We can help you with modern, efficient equipment for Materials Handling • Chain Applications • Materials Reduction • Processing • Sanitation • Mining . . . and with a contract engineering-manufacturing service for your products.



JEFFREY

Founded in 1877

THE JEFFREY MANUFACTURING COMPANY • COLUMBUS 16, OHIO

In Marketing

• • •

Collier's, Woman's Home Companion Fold As Crowell-Collier Gets Out of Magazines

Crowell-Collier Publishing Co. last week gave up the fight to stay in the magazine business. It discontinued Collier's magazine and Woman's Home Companion.

In a year when many magazines were reporting gains, the two Crowell-Collier magazines were losing—to the tune of some \$7.5-million, according to Paul Smith, president. A good showing by the company's book business will whack \$5-million off that loss. But that big blob of red ink undoubtedly looked bad to J. Patrick Lannan, Chicago financier; he and his associates acquired an interest in the company last year. Last week he became chairman of the executive committee, and his associates took over other key spots though Smith is still president.

The new group hopes to hold onto the company. "We have a profitable property now," says S. J. Crowley, Chicago investor.

Though many consumer publications are reporting gains in advertising revenue this year, many are still riding rough seas. One trade source says that among the top 50 magazines, fewer than half are making money.

Paul Smith has had troubles of his own since he took over in 1954. He did succeed in pulling the company into the black last year, but the good news didn't last. The company folded the American magazine last summer. When it failed this fall to find the money to put over its projected purchase of TV and radio stations, many saw the writing on the wall.

At least one big magazine broker believes the magazines were salvageable, though he felt Collier's would have to revise its format. As a bimonthly, it fell somewhere between the stools of news magazines, general magazines, and magazines for men. And it's no secret that in the hotly competitive women's field, Woman's Home Companion faced rough going; its advertising losses have been greater percentagewise than Collier's.

This case illustrates the complexities of folding a magazine. There were some \$18-million in commitments for unfilled Collier's and Woman's Home Companion subscriptions. Look magazine will handle the unfilled Collier's subscriptions—giving Collier's readers a choice of Look or some other, as yet unnamed, magazines—or a cash refund. Look also bought the right to the Collier's name. It expects to net some 1-million new subscribers.

• • •

Oil Companies See Marketing As Their No. 1 Headache

Marketing is the biggest problem for oil companies today. And most of the big companies expect it to continue to be the No. 1 problem in 1960.

This was the finding of a recent survey made by Batten, Barton, Durstine & Osborn, advertising agency that quizzed executives of 121 U.S. companies and 18

Canadian companies to get the answers for Ethyl Corp., major oil company supplier. Of those who replied (nearly two-thirds), 59% named marketing as the prime headache. Crude supply was listed by 17% as their chief worry.

In citing marketing, most company officials named excessive gasoline stocks as the major concern; they ranked introduction of multigrades of gasoline second, and the need for service station dealers third. This year's flurry of new outlets, both here and in Canada, gives point to these views (BW—Jun. 25, p. 145).

Most of those who singled out the crude supply as the top problem gave the rising cost of exploration and competition from imported crude as the sources of trouble.

By 1960, some companies, at least, appear to see a shift. Marketing will still be the No. 1 concern, but only 42% of the reporting companies give it that rating for that year. One-third of the companies see crude supply as their chief headache by 1960 as against 17% who view it as such today.

• • •

New Jersey Car Dealers

Must Shut Up Shop on Sunday

Sunday selling is barred for New Jersey car dealers. The state supreme court this week upheld a law banning such sales, reversing a lower court ruling.

Jersey's highways and heavy traffic have built up a big roadside business in many retail lines. Off-highway retailers have complained bitterly; they are seeking a new law to bar all Sunday sales except such necessities as gasoline, drugs, and the like.

Two dealers had challenged the law forbidding car sales as discriminatory. Chief Justice Arthur T. Vanderbilt held, however, that the charge would not hold since the ban applies to all automobile dealers. He viewed Sunday automobile sales as a threat to public health, safety, and welfare.

"Even a single business enterprise can constitute an insidious accident hazard when the highway on which it is situated is full with superpowered automobiles," he said. Retailers who are pushing the new, broader ban will take comfort from this statement, which obviously would apply to other types of retailing.

• • •

Marketing Briefs

Three big packers—Cudahy Packing Co., Swift & Co., and Armour & Co.—have asked federal courts for release from provisions of the 1920 packers' consent decree that prevent the companies from dealing in many food and non-food items. They say today's competition has ended any advantage they may once have had. The other signer, Wilson & Co., Inc., hasn't stated whether it will also ask for release.

Fair trade score board for 1956, according to the Bureau of Education on Fair Trade: 35 states—containing 75% of U.S. population and 76.5% of total personal income—still have resale price maintenance laws on the books. During the year, five states—containing 6.4% of the population—declared the laws unconstitutional.



This Whiting Crane at Continental quickly carries heavy coils of wire from storage to production —keeping machines busy without jam-up.

How Continental Steel's "special" cranes pay off!

Continental Steel Corporation, Kokomo, Indiana, depends on three "special" Whiting Cranes to keep production flowing fast. Two of them are 5-ton overhead cranes used to spot coils of wire accurately at automatic wire welding machines, then move the finished reinforcing fabric to shipping or storage. The third Whiting Crane is a low profile gantry with floor level hoisting drive. It moves all production in Continental's pickling department and has played an important part in increasing the company's wire production by nearly 50%. These cranes — like all Whiting Cranes — are "special" because each is custom engineered to do a specific job, day in and day out, with a minimum of maintenance. **WHITING CORPORATION, 15661 Lathrop Avenue, Harvey, Illinois**



SEND FOR THIS REPORT!

An illustrated 6-page case study, "Custom Built Whiting Cranes for Continental Steel Corporation" tells how these cranes were engineered to solve special problems. Write for a copy today.

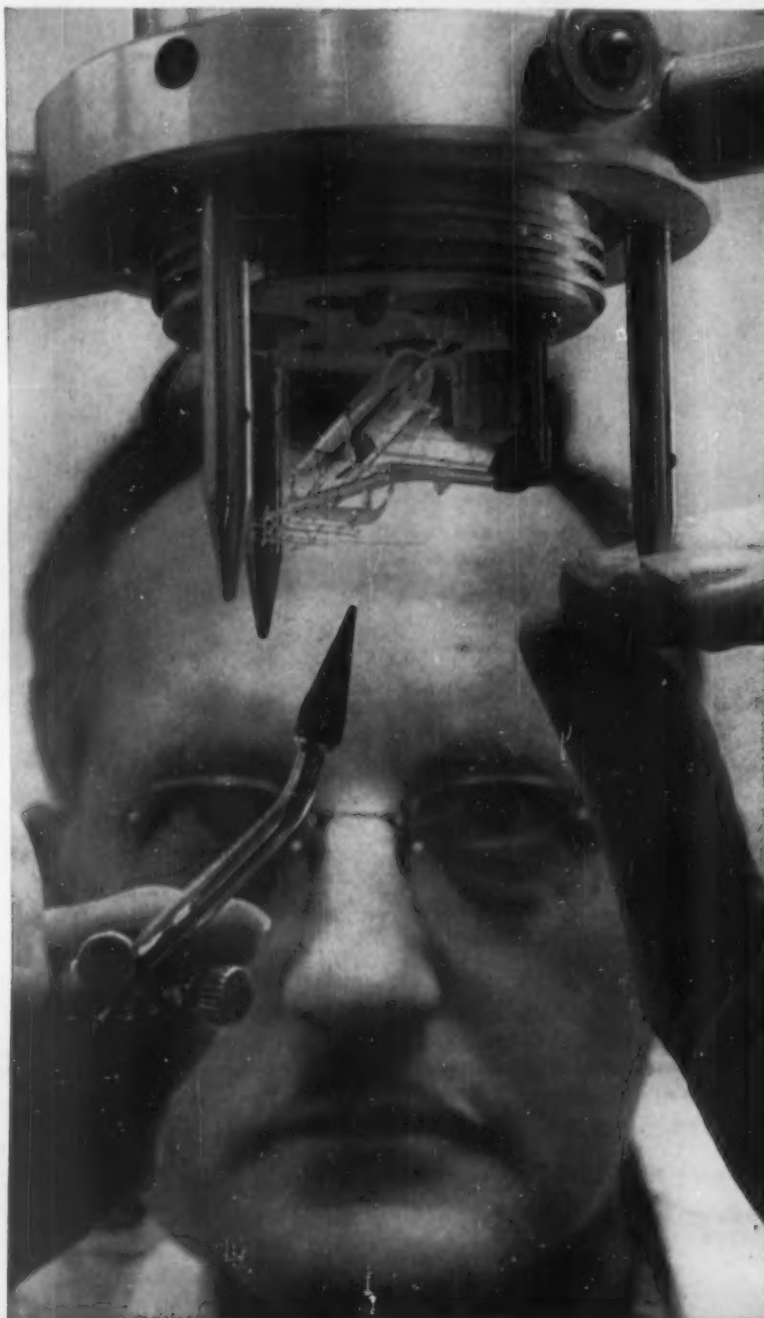
RESEARCH



ASSEMBLY of read-out unit of data gauge used in tank farms (right) is checked by Paul Williams, project engineer.

HISTORY of Texas Instruments began with geophysical gear like seismometer (left), held by Pres. Jonsson.

GRAVITY is measured by hypersensitive quartz element, below being adjusted by man with small oxygen torch.

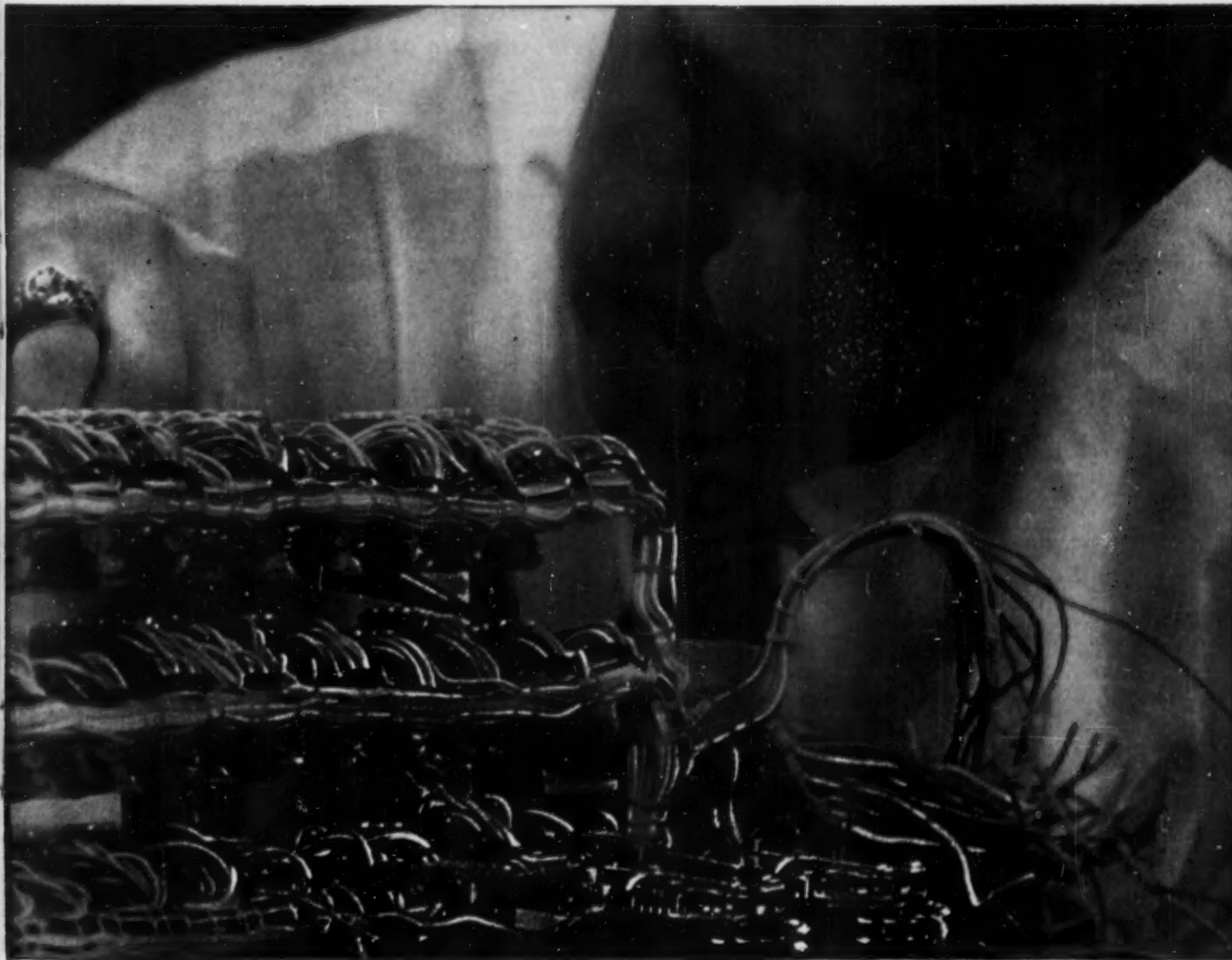


Research

ORDINARILY, it takes a big company to make the rather specialized electronic components shown in these pictures. And in big companies there are formidable hurdles between basic research and the production line.

Texas Instruments, Inc., is an exception on both counts. It is only fairly big (sales estimated at \$44-million this year)—not in the class of General Electric, RCA, Raytheon, Philco, or Sylvania. And it has close liaison among scientists and technicians all the way from fundamental research to assembly.

That's why, according to Pres. J. Erik Jonsson (cover and above), Texas Instruments has been first in commercial production of two new-type transistors: a high-frequency transistor and a silicon transistor that goes on doing



Packed With Ph. D.'s

its job at very high temperatures.

• **Closing the Gap**—The key to teamwork at Texas Instruments is the cozy relation between fundamental research, which is done by a central staff for all product divisions, and product research, in which each division puts the ideas to commercial use.

The company has closed the breach that often hampers cooperation among such groups by (1) bringing the central, pure-science researchers down to earth and (2) raising the status of the product researchers. There are as many Ph. D.'s in product research as in the central research crew.

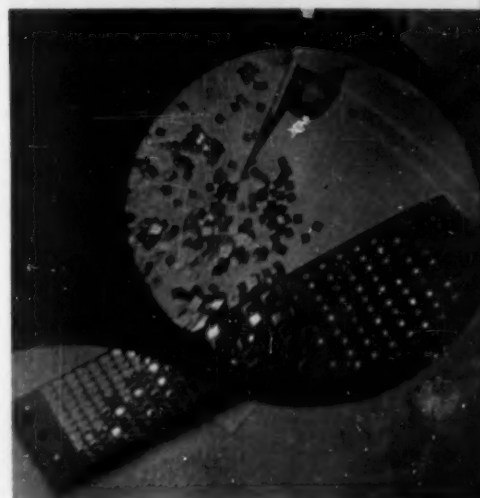
Central research, of course, works on the company's basic knowledge, product research puts it to commercial use. Marketing and management people work hand-in-hand with the researchers

at both levels, keep the scientific eye fixed on a commercial goal.

"We can't afford to spend a lot of money and time on blue-sky research," says Mark Shepherd, Jr., vice-president in charge of the Semiconductor-Components Div. "We've got to figure out new things, sure, but we've got to figure out things that will sell."

• **Passing It On**—Generally, the central research staff, headed by Asst. Vice-Pres. Gordon K. Teal, carries a project to the "breadboard" stage—to the rough working model that indicates the idea may work. It doesn't try to solve every problem—product research does that.

This transfer from one jurisdiction to another is considered important at Texas Instruments. If silicon transistors, for example, had been left with central research, company officials say, the



TRANSISTORS of the alloy junction germanium type are built around minute semi-conductor components.

"... we have deliberately tried to eliminate the NIH (not invented here) attitude at Texas Instruments ..."

STORY starts on p. 56

purists "might still be fussing around" in search of perfection. As it was, the product staff took over, made a silicon transistor that works, and figured out how to produce it economically. Even before production bugs were worked out, marketing people had customers standing in line.

In many companies, it takes five years to get something like that on the market, TI officials say. "We don't have time to do that," adds Executive Vice-Pres. P. E. Haggerty.

Specifically, Haggerty says, Texas Instruments can't afford any working at cross purposes in its research program. "We have minimized the 'NIH' [not invented here] factor, the attitude of 'You invented it—you make it work,'" he says.

• **Mobilizing Brains**—About one-third of Texas Instruments' 4,500 employees are specialists of some kind, and the company is heavy with scientific brain-power.

"We can offer two things that scientists look for most," says Haggerty. "One is a chance to keep busy at things they like to do; the other is things that are tough enough to be challenging. A lot of bright boys become bored at being handed jobs that provide no challenge. We in Staff Operations work hard to see that this never happens here."

Besides, Texas Instruments, based in Dallas, has few rivals in attracting scientists and engineers in the Southwest. It gets a high percentage of its people from Southwest colleges—men who prefer to stay close to home rather than go north or east to find the jobs they want.

I. Texas Born and Bred

Texas Instruments traces its pedigree back to 1930, to the research laboratories of Geophysical Service, Inc., founded in Newark, N. J., by J. C. Karcher and Eugene McDermott, who is now TI's board chairman. According to company historians, GSI was the first independent company to make reflection seismograph surveys of potential oil fields, and its Texas labs developed and produced equipment for such work.

Laboratory and manufacturing operations eventually became paramount in the company, whose name was changed to the present title in 1951. Jonsson, the current president, was one of the company's earliest lab superintendents.

The original Geophysical Service,

Inc., lived on as a subsidiary of TI. But the new parent company started broadening into new fields after 1951. It had acquired Houston Technical Labs, Engineering Supply Co., and the Intercontinental Rubber Co. (BW—Apr. 17 '54, p. 80), all as subsidiaries, before the end of 1953. In mid-1955, the Radell Corp. was acquired; Burlington Instrument Co. and the Wm. Mann Co. joined the fold earlier this year.

• **Product Divisions**—Texas Instruments has four main product divisions: Semiconductor-Components, headed by Shepherd; Houston Technical Labs, the petroleum instrumentation division, headed by Bob Olson; Apparatus Div., which makes electromechanical equipment, headed by W. F. Joyce, and the newly acquired W. I. Mann Co. Div. (optical instruments) of Monrovia, Calif.

II. Looking Ahead

The list of divisions and staffs barely hints at the range of research in which Texas Instruments is busy. In line with its policy of making "things that will sell," TI is developing new transistors for commercial production. Its silicon transistor is already a candidate for military uses, as in guided missiles, at temperatures that melt conventional equipment. But exciting work is being done on transistors that resist even higher heats.

These heat-resistant transistors have uses not only in military gear but in industrial electronic equipment as well. The silicon transistor, says Texas Instruments, can be used in complicated equipment where the heat generated by other components has limited the use of germanium transistors.

An electronic brain, for example, may occupy a large room, may need several tons of air-conditioning capacity to keep it cool. That's because of the heat generated by thousands of vacuum tubes. By replacing tubes with silicon transistors, TI people see the possibility of shrinking a room-sized computer to desk size. Then, too, the most complex computers would find wider use in supersonic military planes and missiles.

• **Growing Crystals**—Texas Instruments is a pioneer in the tricky art of growing crystals as a semiconductor components. For growing bigger and purer crystals, it designed and built its own "crystal pullers"—devices that develop large crystals of germanium or silicon from a "seed" of the desired material in an atmosphere of helium at above 1,500F.

The company has 20 crystal pullers,



WOMEN AT WORK on assembly line making airborne radar indicators are preferred to men, because of manual dexterity.



Above you see another method of copper mining—using scrap iron, mine water, and ingenuity.

Trading old tin cans for copper

THE PROBLEM: Disposal of mine water is a big operation in Anaconda's Butte copper mines. Every day, 8,000,000 gallons must be pumped to the surface. Yet every gallon contains a tiny amount of copper sulphate in solution. Reclaiming this copper, chemically, is as simple as a classroom experiment. But the problem was to do it on a colossal scale—economically.

THE SOLUTION: Anaconda engineers devised a precipitation plant with a system of open tanks which are filled with scrap iron—mostly in the form of tin cans—reclaimed from the dumps of western cities. Wrappers are burned off and the cans are cleaned, washed, de-tinned and shredded. An ocean of copper-laden mine water flows over and dissolves this scrap iron, precipitating the copper out of solution.

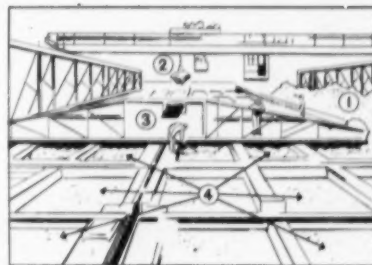
Using two pounds of cans for one

pound of the red metal, Anaconda reclaims 93% of the copper in the mine water—an average of 5,000,000 pounds a year.

A good trade for Anaconda, and for a nation that uses far more copper than any other in the world.

SERVICE TO INDUSTRY: At Anaconda, the kind of metallurgical skill that squeezes ounces of copper from a ton of water, economically, is solving many other tough metal problems.

In Anaconda's manufacturing companies—The American Brass Company and Anaconda Wire & Cable Company—these skills and experience are at work every day helping industry cut manufacturing costs, improve products. For help in your special problems, see the *Man from Anaconda*. The Anaconda Company, 25 Broadway, New York 4, New York.



1. Scrap iron storage—shredded, de-tinned cans. 2. Magnet on crane carries cans to tanks. 3. Hydraulic slusher washes small copper particles from cans in tanks. 4. Tanks, called launders, where mine water flows over the scrap. The cans become iron sulphate which flows off with the water. Freed copper particles drop into tanks at the end of each launder section. The precipitate, cement copper, is removed periodically, sent to the smelter, and eventually becomes copper refinery shapes.

ANACONDA®

641229

What's the most versatile



It's GM—Choice of more than 150 equipment builders

General Motors Detroit Diesel engines power more different types of road-building equipment—built by more manufacturers—than any other Diesel.

These versatile two-cycle engines drive compressors, crushers, drills, pavers, graders, shovels and the world's most powerful off-highway vehicles.

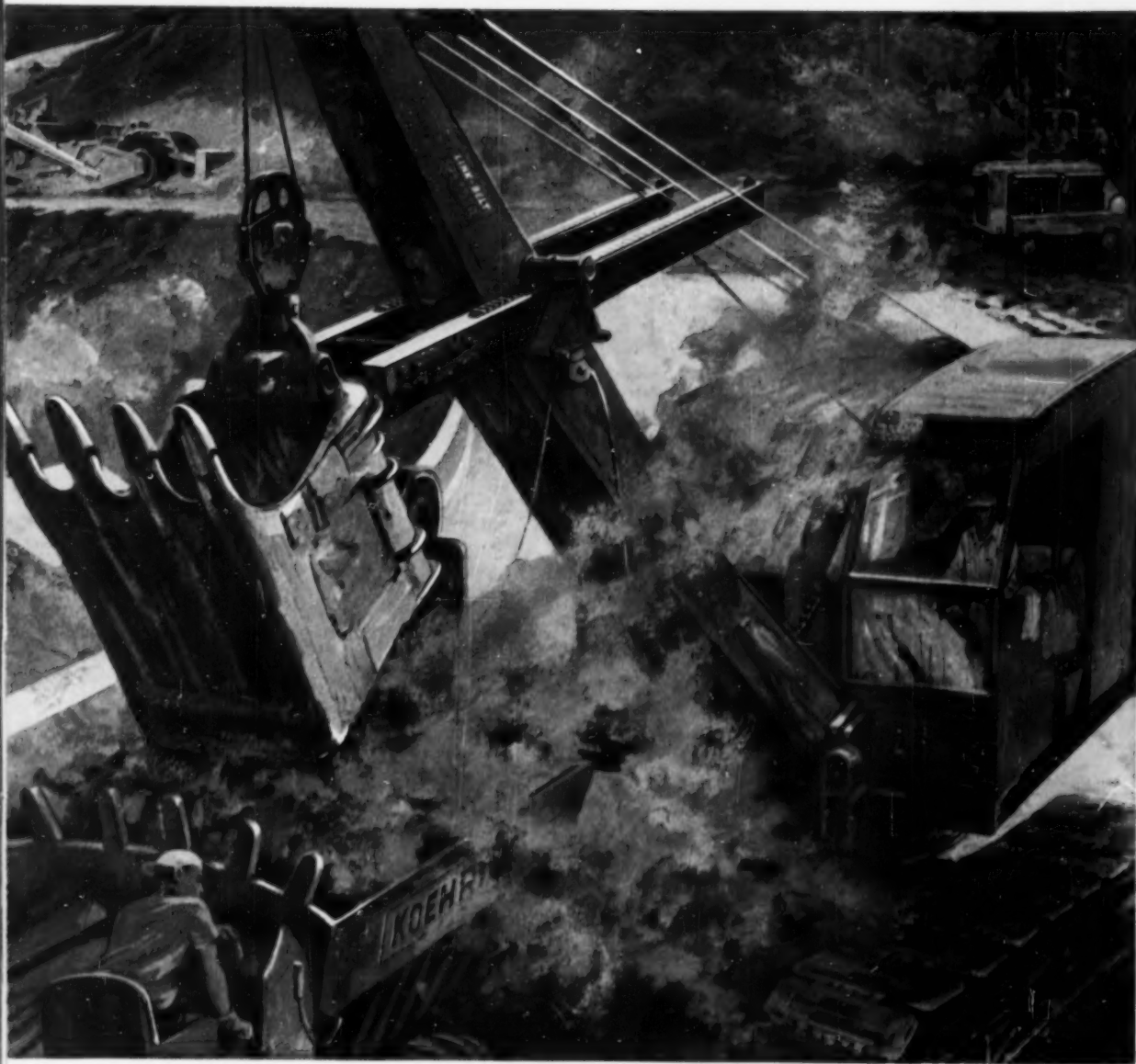
Leading manufacturers install GM Detroit Diesel power in more than 1000 different machinery applications because it gives their customers unequaled work output and dependability, plus the backing of a world-wide service organization.

Contractor experience has proved GM Detroit Diesel power more efficient than either gasoline engines or other Diesels on almost every kind of job from 30 H.P. up. And Detroit Diesel's new Turbopower engines deliver even higher efficiency—*up to 17% more power on the same fuel, or the same work with fuel savings up to 15%!*

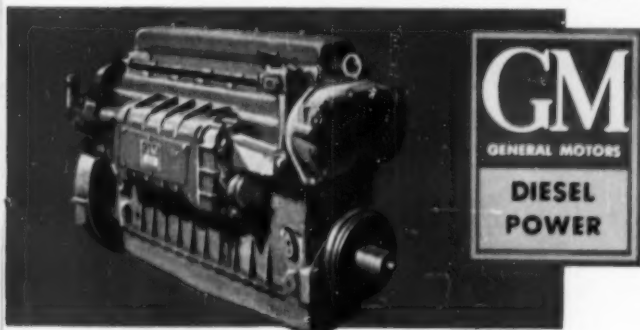
You're money ahead when you specify GM Detroit Diesel power in any equipment you build, buy or repower. It's America's First Choice Diesel *because it does more work at less cost!*

SEE OUR EXHIBIT AT THE ARBA ROAD SHOW, CHICAGO, JAN. 28 TO FEB. 2

Diesel in Road building ?



Equipment shown includes: Blaw-Knox MultiFoot paver and spreader; Koehring Dumpers; Cedarapids rock crusher; Link-Belt and Unit shovels; Ingersoll-Rand air compressor; LeTourneau-Westinghouse Tournapull and Pettibone Mulliken front-end loader. Write us for complete list of over 1000 GM Detroit Diesel power applications.



Single Engines...30 to 300 H.P.

Multiple Units...Up to 893 H.P.

DETROIT DIESEL

Engine Division of General Motors
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Regional Offices:

New York, Atlanta, Detroit, Chicago, Dallas, San Francisco

In Canada:

GENERAL MOTORS DIESEL LIMITED, London, Ontario



Gown designed for the Alcoa Collection by Jean Dessès, Paris

Look at the AMAZING things Alcoa Industrial Foil is doing

She walks in beauty . . . her gown a masterpiece woven of brilliant metallic yarn

made of Alcoa® Aluminum Foil. Glowing yarns like those used to create this dress will spark your rugs, inspire your draperies, enliven your upholstery for cars or furniture.

Wispy light yet strong, aluminum yarns are non-tarnishing, available in a color range second only to the spectrum. Weave them into billowy chiffons or stately brocades. They make any fabric a sight to dazzle the eye.

Manufacturers of metallic yarns are doing exciting things with Alcoa Aluminum Foil. We'd like you to know about them. Write today to Aluminum Company of America, Industrial Foil Division, 1655-M Alcoa Building, Pittsburgh 19, Pennsylvania.

You're always ahead with Alcoa . . . greatest name in aluminum



THE ALCOA HOUR
TELEVISION'S FINEST LIVE DRAMA
ALTERNATE SUNDAY EVENINGS



TWO KINDS of research are personified by Mark Shepherd (left), head of semiconductor product research, and Gordon K. Teal, head of the central research staff.

has succeeded in growing the largest semiconductor crystals known—each about 6 in. across. This research isn't aimed at setting records. Instead, it fits in with the purchase of the Mann company earlier this year. It is aimed at making optical lenses of silicon crystals.

• **See in the Dark**—Physicists know that some materials are transparent for infrared light while opaque to normal light. If a large silicon crystal was ground into an optical lens, it would not transmit ordinary light. But a telescope using silicon lenses and an infrared detector would enable you to see anything "lighted" by an invisible infrared beam, no matter how dark the night.

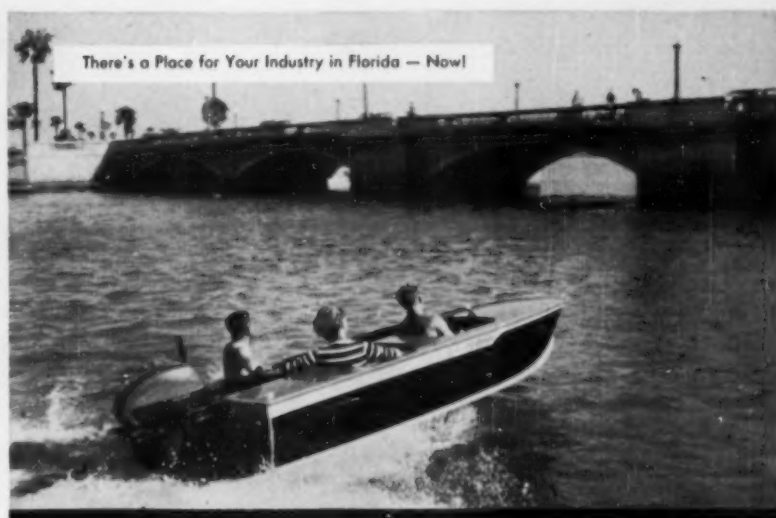
Like much other work that's being done for military service, this is under a security veil, but it's an example of the kind of venturesome project that keeps TI scientists constantly on their toes.

• **Operation Bluebonnet**—The company is also pushing solar energy research. As part of its laboratory fun and games, it has a rig called "Operation Bluebonnet" that demonstrates conversion of sunlight into electricity.

A cheap pith helmet is painted blue, one of several colors that absorb the sun's heat. At the crown is mounted a solar converter made in the lab, which supplies enough electric power to operate a small motor mounted on a framework that fits under the wearer's chin. The motor spins a small fan.

Thus, when the wearer of the Bluebonnet strolls in the sun, the fan will automatically stir up a cool breeze across his face. And the harder the sun beats down, the faster the fan will spin.

The solar converter used in this stunt is so sensitive that the light of an ordi-



There's a Place for Your Industry in Florida — Now!

Three reasons why you can get skilled manpower in FLORIDA

1. Florida has a substantial skilled manpower pool now!
2. Skilled manpower wants to and will come to Florida!*
3. Once located in Florida, people stay—so Florida's manpower pool grows constantly!

* Send for documented case histories.

Florida's manpower pool is surprisingly large and versatile because people want to live in Florida. Here are some concrete examples:

A GIANT CHEMICAL COMPANY [4,500 employees]—"able to hire workers of all types successfully and in time to meet requirements. Company is well pleased with calibre of personnel available . . . a high quality work force has been secured."

AN AIRCRAFT COMPANY [400-500 employees] — "They actually flooded us. We are able to employ all of skilled workers including machinists, sheet-metal workers, and engine mechanics necessary from applications now on file."

AN AIRLINE OVERHAUL BASE [5,000 employees] — "More applicants than we have room for. On the average, applicants are a better class of people."

A CHEMICAL INDUSTRY [500 employees]—"Florida definitely does attract people for jobs. No advertising is conducted. No serious problem in getting necessary help."

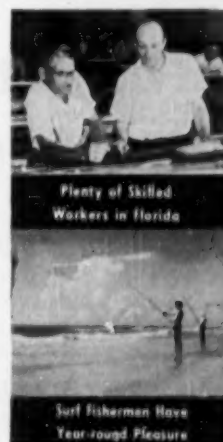
Florida has manpower, water, transportation, power and whatever else you need. Taxes are most favorable to business and industry.

Keep Florida in mind as the hub of your industrial future . . . strategically situated in regard to the fastest-growing U. S. and Latin-American markets.

Address: Florida Development Commission,
3602E Caldwell Building, Tallahassee, Florida

FLORIDA

...land of good living



For solid Florida industrial facts, write for the "FLORIDA FACT KIT" containing folders on:

- MARKET
- LABOR
- HEALTH & CLIMATE
- GOVERNMENT & TAXES
- POWER
- TRANSPORTATION
- WATER
- EDUCATION & CULTURE
- NATURAL RESOURCES
- RESEARCH



Photo illustrates cleaning efficiency of Buell "SE" Electric Precipitator. Precipitator section serving left stack has power turned on while right section has power off.

Taking the Smoke out of Smog!

STRICT ORDINANCES against air pollution are no problem when Buell Dust Collection Systems are put to work. Why? Because that extra percent of efficiency engineered into Buell systems permits full production even under the toughest anti-air-pollution codes.

HAPPY SOLUTION to your air pollution problem rests entirely in Buell's hands. Buell engineers accept complete responsibility from problem stage to the successful operation.

NO GUESSWORK in a Buell installation either! Buell engineers analyze your "smoke," study your operating conditions, make recommendations based on experience and the performance data of comparable Buell installations the world over.

WRITE TODAY for booklet "The Recovery and Collection of Industrial Dust." Dept. 30-L, Buell Engineering Company, 70 Pine Street, New York 5, New York.



buell



Experts at delivering Extra Efficiency in
DUST COLLECTION SYSTEMS

nary flashlight produces enough electricity to turn the motor.

"We can do this all right," says one of the lab men. "What we're working on is to produce electricity competitively."

• **Geophysics**—About one-third of Texas Instrument's business is still with the oil industry, so the company pushes research in that direction, too. One of the products of the Houston Technical Labs is the seisMAC—an electronic brain with a degree in geophysics.

This machine can take the jumble of "wiggles" that show up on a seismometer's graph, correlate them, correct them for variables, and turn out a picture of a vertical slice of earth three miles long and three miles down. SeisMAC does in minutes what a highly trained crew would take many hours to do. And with its magnetic data storage, it can remember indefinitely what it has figured out. Two of these have already been built.

The next step will be a transistorized seisMAC, if the HTL staff can work it out.

• **Sensitive Spring**—HTL is also credited with developing a way to make springs of pure quartz, so sensitive that there's no standard term to describe what they measure when incorporated in HTL's gravity meter.

Sam Worden, the man who developed HTL's gravity meter, and also worked out the method for making the quartz springs.

A spring made of quartz, finer than a human hair and coiled to about an inch long, can be stretched to arm's length, and its elasticity is so perfect that HTL says it never develops fatigue, as metal springs do.

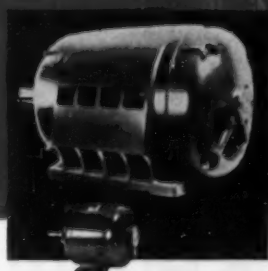
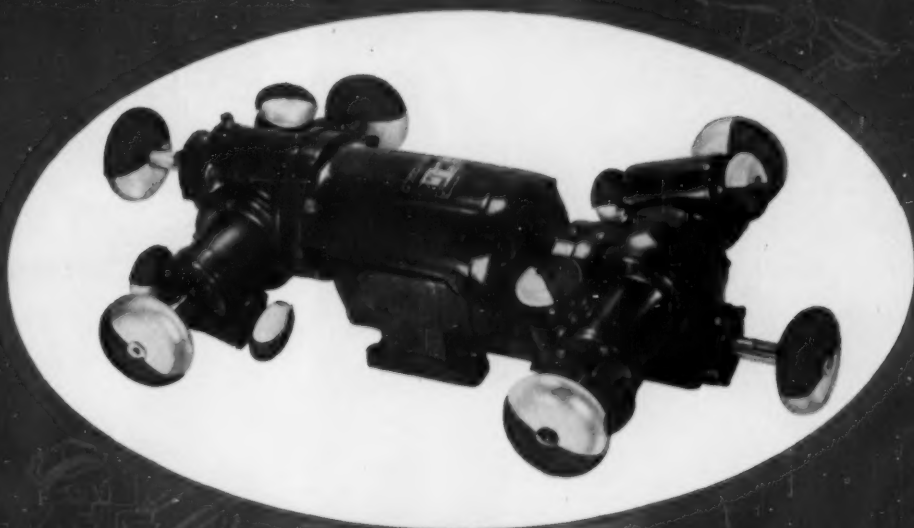
Uses for these springs, and for the meter itself, are being developed far outside the oil-prospecting business. Several instruments using it are in the Antarctic for studies in connection with the International Geophysical Year.

• **Growing**—By expanding small acquisitions and developing new products, as well as sales expansion in older markets, Texas Instruments has already grown from \$15.4-million sales in 1951 to this year's probable \$44-million. Next year, Jonsson expects to hit between \$60-million and \$70-million, and he talks of exceeding \$200-million a year by 1965.

With such past and potential growth, the company is outgrowing its plant facilities. It is in the middle of a series of moves into new quarters.

Last October, the Houston Technical Labs division officially opened its new plant in Houston literally in a cloud of smoke—a great puff set off by an impulse of one of its new products, an electric dynamite blaster. And, north of Dallas, construction is starting on a new home for the Semiconductor-Components Div., for occupancy late next year. **END**

Why not build the cart
before the horses?



Just tell us here at Master what you want in power drives—and get the utmost in flexibility, compactness and performance. It probably won't be as complicated as the multi-shaft Gear-motor illustrated here, with 14 shafts turning at diverse speeds. But, regardless of what you need, Master can supply the right combination of horsepower, shaft speed and mounting features with whatever Master components are required—all combined in one compact efficient unit. Just ask for information.

Motor Ratings. $\frac{1}{8}$ to 400 H.P. All phases, voltages and frequencies.

Motor Types. . . . Squirrel cage, slip ring, synchronous, repulsion-start induction, capacitor, direct current.

Construction . . . Open, enclosed, splash-proof, fan-cooled, explosion-proof, special purpose.

Speeds Single-speed, multi-speed, and variable speed.

Installation . . . Horizontal or vertical, with or without flanges and other features.

Power Drive Features Electric brakes (2 types)—5 types of gear reduction up to 432 to 1 ratio. Mechanical and electronic variable speed units—fluid drives—every type of mounting.



THE

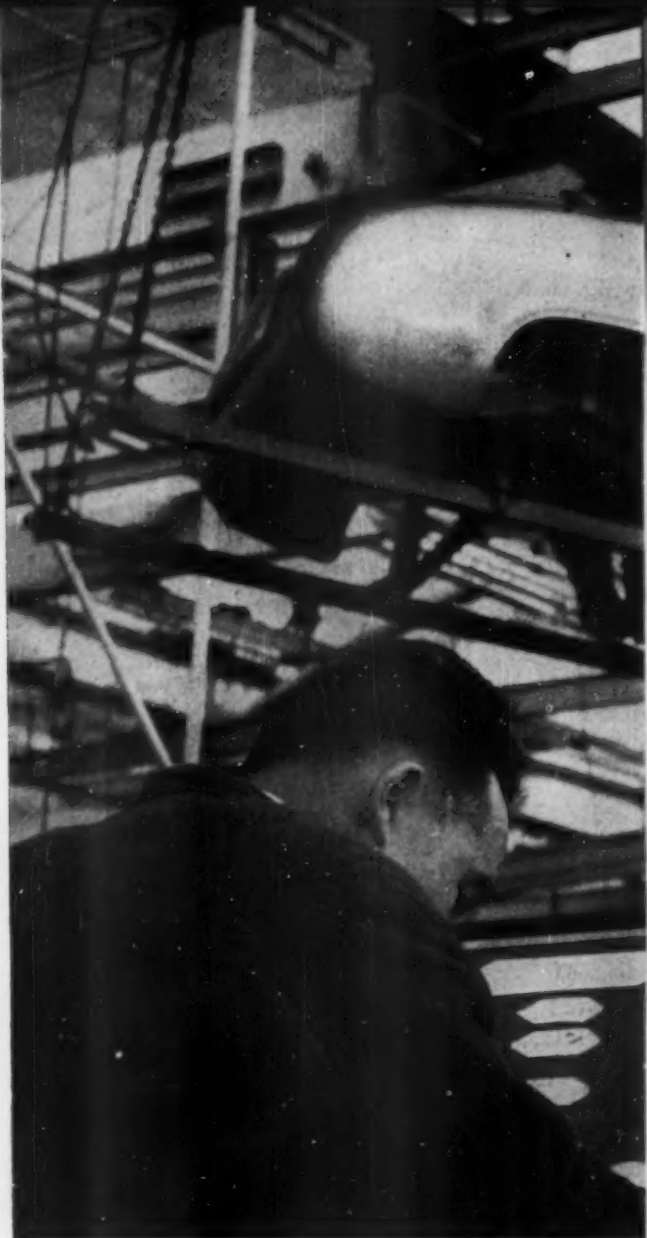
ELECTRIC COMPANY, Dayton 1, Ohio



SPEED is needed in Renault's sheet metal shop to keep pace with higher car output at nearby assembly line.

AUTOMATION at Flins assembly plant (right) is top-flight. Daily output will hit 1,000 cars in March.

SALES DRIVE in U.S. for the new Dauphine is headed by Robert L. Lamaison, Renault vice-president.

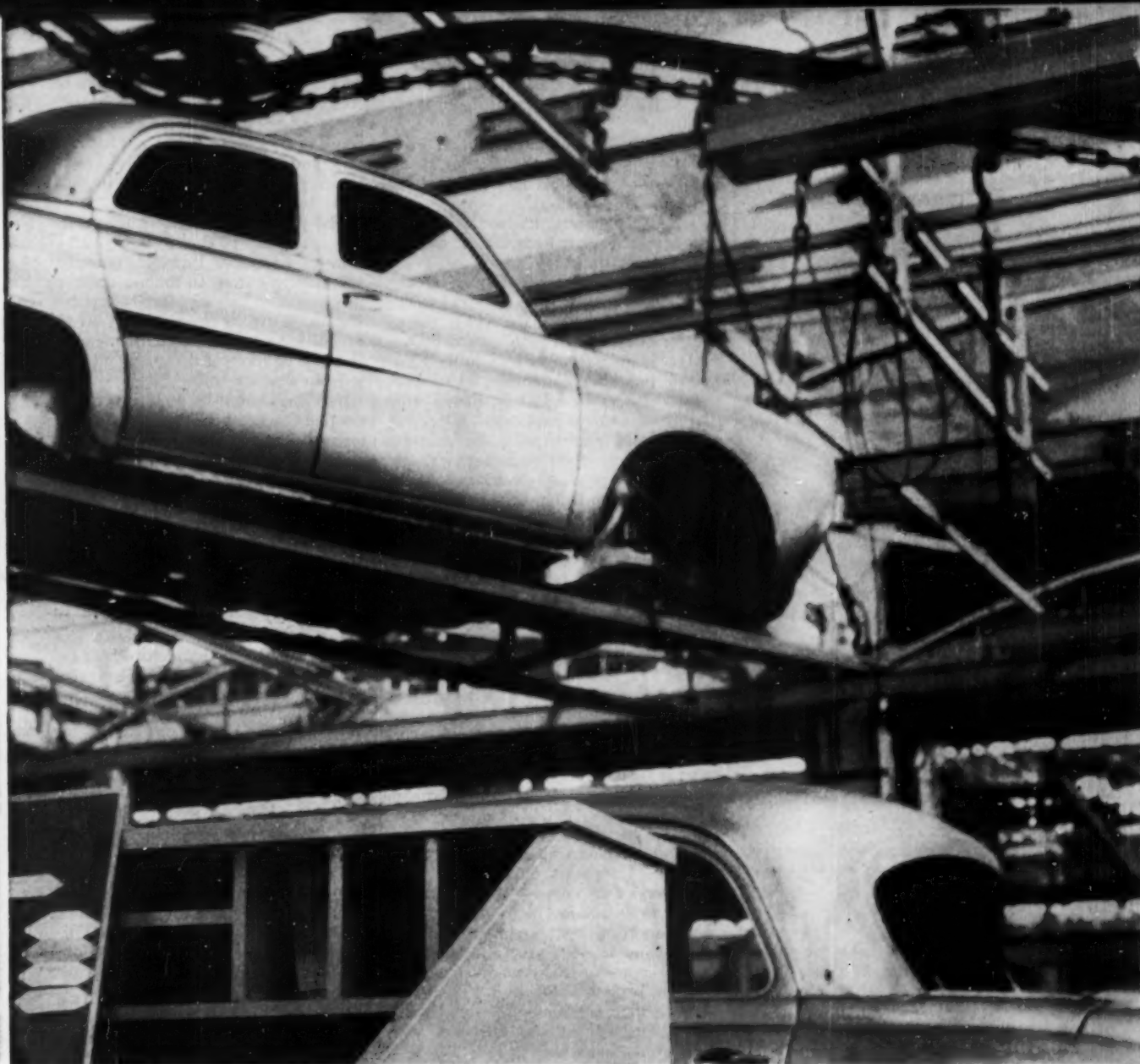


Renault's

The small Dauphine (pictures) is Renault's bid for a larger share of the U.S. foreign car market.

State-owned Renault is the No. 1 automobile producer in France. By year's end, it will have turned out about 270,000 cars and trucks—not to mention tractors, buses, railroad cars, and machine tools. All told, it makes around 35% of French-built vehicles.

But in the U.S.—one of 73 countries to which the company exports—Renault ranks only 11th in foreign car sales. It sold 3,000 cars here this year, compared with 50,000 for West Germany's Volkswagen.



New Starter in U. S. Sales Race

Now Renault has its sights set on selling over 20,000 cars—mostly the brand-new Dauphines—in the U. S. during 1957. It will be competing directly with the Volkswagen for “second car” buyers. But in price, Volkswagen’s \$1,495 car will have an edge over the \$1,645 Dauphine.

No one is sure whether Renault can hit its mark in the American market—except for Robert L. Lamaison (picture, left), Renault vice-president and newly appointed North American manager. Already, he says, Renault has orders from distributors for 10,000 cars.

• **Poor Start**—The company is no new-

comer to the U.S. market. In 1948, while still cleaning up World War II damage at its main plant at Billancourt (just outside Paris), it began selling its tiny, mass-produced 4CV here. In France, this Volkswagen-sized runabout has found some 800,000 customers since the end of the war. But U.S. sales have never amounted to much. Auto buffs attribute this to the 4CV’s stubby look and lack of room. Renault says—privately—that it’s because the company botched its U.S. campaign. Among the errors: no carefully planned spare parts and repair system of the kind Volkswagen started with a few years

later—and a weak distribution setup.

Last year Renault sold only 886 4CVs in the U.S. Then the French government, in effect, told Renault to boost exports. And, at the same time, Lamaison urged that the U.S. market be tapped in a big way. Pierre Dreyfus, Renault’s president, was skeptical. For one thing, Renault had an 18-month domestic order backlog to fill and its position as No. 1 auto producer to maintain. For another, neighboring European countries offered a rich, easy export market.

• **Optimistic Outlook**—Finally, Dreyfus gave the green light. Three weeks ago

Renault, faced by slower sales in France and Europe because of the gas shortage, was shipping Dauphines to the U.S.—a month ahead of schedule. Two weeks ago Lamaison moved from Paris to New



PIERRE DREYFUS, 49-year-old president of state-owned Renault, sets policies.



BERNARD VERNIER-PALLIEZ, 39-year-old secretary-general, oversees operations.

York City to head the sales campaign.

Lamaison thinks he can sell as many as 30,000 Dauphines in 1957, for these reasons:

- The Dauphine, like the 4CV, is rear-engined, but it is handsomer, roomier (with four doors and a trunk big enough for golf bags).

- Renault now has well-laid plans for shipping spare-parts kits to dealers, along with the cars.

- Renault is concentrating its selling efforts in areas where it thinks sales will be easiest to make. This means fewer dealers, with more cars delivered to each, and a stronger push in the East. "I'm not after California," Lamaison says. "Better be first here than fourth or fifth on the West Coast."

- **Shipping Problem**—In the months ahead, selling won't be Lamaison's only problem. Shipping space is hard to come by—something that has plagued British auto makers (even before Suez). A month ago, for example, Lamaison spent a week in Spain primarily to charter cargo space for U.S.-bound Dauphines. And though state-owned, Renault in the past year has barely gotten its fair share of cargo space aboard ships of the state-controlled French Line.

But backing Lamaison's sales drive is an organization as pushy and competitive as any privately owned company. Recurring rumors have harped on Renault's "special deals" with the French government. Answering these, Bernard Vernier-Palliez, secretary-general and Dreyfus' right-hand man, points to the \$317-million Renault has paid in taxes to the government since the war. In addition, the company says it has spent \$430-million (75% of it by plowing back earnings) on new plant and equipment in 10 years. That includes \$30-million for the two-mile-long assembly plant at Flins and \$70-million for Dauphine tooling-up. Besides 10 plants in France, Renault now has seven more overseas.

- **Narrow Base**—Though Renault is an industrial complex—producing half its steel needs, many of its highly automated machine tools, among other things—it is trying to narrow its base of operations. "We don't want to be highly concentrated," Vernier-Palliez says. The company, for instance, gave up making tires two years ago. Today, out of \$400-million in sales, about 85% comes from cars and trucks, 10% from tractors, and 5% from rail equipment.

Renault also is France's largest single employer, with 53,000 workers. But its top position in France's auto industry is a far cry from prewar days. Then, Citroen was top dog, making 68,000 cars a year, compared with Renault's 55,000. Founder Louis Renault was a brilliant inventor, smart financier (his reputed fortune: \$700-million), but a

disinterested salesman. In 1944 the French government imprisoned him for collaboration, and he died shortly afterward. The government set up a 14-man board of directors representing both the state and workers, made Pierre LeFaucheux president—the position he held up to his death two years ago.

- **Rehabilitation**—At the end of the war, Renault produced only 12,177 vehicles annually. Part of its current success stems from an intense desire to make good on its own—despite nationalization. First, it repaired war-blasted production lines. Then, with the acute shortage of tools, it designed and built its own machine tools, including huge transfer machines. In 1950, to cut production costs, it built the up-to-date assembly line at Flins, which, experts say, has some features that are ahead of Detroit's best. In actual fact, the government has kept out of practically all this development. For Renault, the real difference between private and government ownership has been its detailed annual report to the government each year (which Citroen, its traditional rival, doesn't have to make).

Renault's fast growth also reflects the postwar upsurge in demand for cars in France—and in the French Union. For instance, this year's total car production in France will top 600,000. That's well above 1955's 553,000, which, in turn, was 25% ahead of 1954. And the industry sees even bigger demand in the coming years.

- **Rivals**—Overseas, Renault's big rival is Volkswagen, whose production this year will be 390,000 units. Like Renault, Volkswagen is under state control and concentrates on a small car. But it exports over 50% of its small car production, as against Renault's 25%.

Inside France, the No. 2 producer SIMCA is coming up fast. (Citroen has dropped to third.) The current gas shortage is scaling down the company's expected output of 190,000 cars this year. That's because SIMCA's mainstays—the Aronde and Vedette series—are medium-sized cars and big gas eaters compared with Renault's 4CV and Dauphine, for instance.

But if and when the oil crisis passes, SIMCA will be gunning for a larger share of sales in the French car market. Among its backers are Italy's FIAT, which reportedly holds 40% of the stock through Swiss banks, and Ford Motor Co., which owns 15% of the stock. The 1954 merger with Ford's French subsidiary gave SIMCA a stronger dealer setup, technical advice from Dearborn, and—above all—Ford's plant and surrounding land at Poissy. Now, at Poissy, SIMCA is spending some \$110-million to expand production. There's no doubt that in the future it hopes to be racing Renault neck and neck for first place. **END**

In Business Abroad

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Brazil's Auto and Truck Industry

Moves Ahead With Expansion by GM

The Brazilian government has given General Motors permission to import \$10-million worth of machinery for the new truck plant GM is building near Sao Paulo.

This marks another big step in Brazil's program (BW—Nov. 10 '56, p103) for developing an auto and truck industry using Brazilian-made parts. GM has had an assembly plant near Sao Paulo since the late 1920s. The plant, at present, makes bus and truck bodies and, with U. S.-made components, assembles all types of GM cars (including the West German Opel car).

The new plant, slated for 1958 production, will make trucks from start to finish. The plant will include a modern engine-block foundry—the first of its kind in South America.

By the time the plant opens, GM will have some \$40-million invested in Brazil (including nearly \$600,000 in local financing for the new plant). Auto industry executives in Brazil expect the GM truck project to spur Ford, Chrysler, and other auto-parts makers to invest more heavily in new Brazilian production facilities.

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Malayans to Take a Bird's-Eye View

In Search of More Mineral Deposits

The Malay peninsula is a major source of the world's tin. Now, the Malayan and Canadian governments will split the \$400,000 cost of making a detailed aerial survey of the peninsula to find new tin deposits, as well as other minerals such as tungsten and ilmenite.

This will be the first major project in Malaya undertaken by Canada as a member of the Colombo Plan for development of Southeast Asia. Shield Spartan Air Services, Ottawa, which will make the survey, has done similar work in locating uranium in Canada and oil in both India and the Philippines.

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Suez Jitters Spread to Panama

As Billionth Ton of Cargo Passes

Last week officials of the Panama Canal Zone stopped the 7,800-ton Edward Luckenbach and awarded its captain a scroll. The freighter was carrying the billionth ton of cargo to pass through the canal since its opening in August, 1914.

The ceremony also served to point up the vital stake of the U. S. in keeping the canal free from trouble. Since 1914, more than 250,000 ships have used it. Post-World War II traffic has boomed. In 1946, some 8,800 ships carrying about 15-million tons passed through; this

year, just under 10,000 ships, carrying 45-million tons.

The U. S. is still the canal's largest customer—with 14-million tons carried in its ships. England and Norway are in second and third place. The biggest change in traffic flow in recent years has been the step-up in shipments of raw materials—iron ore, for instance—from South America's west coast to the U. S. As a side effect of the Suez crisis, canal officials note an increase in traffic from Australia, New Zealand, and Japan.

But Suez has also churned up nationalist sentiment in Panama and given State Dept. officials a case of jitters. The Panamanian government has charged the U. S. with bad faith in not complying with terms of the 1955 U. S.-Panama treaty. Spurred by Nasser's Suez action, various politicians have criticized Congress for not implementing terms of the treaty—which affects some 80,000 Panamanians.

Panama's newly inaugurated Pres. Ernesto de la Guardia is trying to keep the lid on extreme nationalists, some of whom favor rewriting the treaty to give Panama a place in the canal's management. With Nasser still riding high, many observers feel the squabble over the canal could easily reach the boiling point soon.

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United Fruit to Share More Profits

With Guatemala's Anti-Red Government

In three moves last week, the United Fruit Co. sweetened its already good relations with the anti-Communist Castillo government in Guatemala by:

- Agreeing to pay up to 30% of the profits from its east coast—as well as west coast—plantations to the government.
- Promising to hand over to the government about 100,000 acres from its east coast property not under cultivation—about the same amount it gave back in 1954 from its west coast property.
- Announcing it would put \$5-million into improving its disease-ridden east coast holdings over five years.

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Business Abroad Briefs

In Britain: The gas shortage has severely cut into new-car sales, forced used-car prices down 20%. . . . Coal and coke prices rose 9½¢ a ton this week because of higher costs for gasoline for delivery trucks.

Aluminium, Ltd., which recently announced a huge bauxite and alumina project in French Guinea (West Africa), now plans a \$33-million alumina plant for British Guiana (South America). Alumina is an intermediate product processed from bauxite, then smelted into aluminum.

Brazil will close a deal with the Export-Import Bank any day now for the purchase of 1.8-million tons of wheat valued at \$110-million. The Brazilian government will use proceeds from resale of the wheat to finance basic development, repay the cost of the wheat as an Ex-Im loan over 40 years.

Christmas

St. Nicholas, tradition says, is not only the patron saint of children and merchants, but the spiritual overseer of pawnbrokers as well. And pawnbrokers, like children and merchants, find that Christmas is the time when St. Nick best tends to their interests. Loan volume is always at peak for the season; this Christmas looks to be no exception.

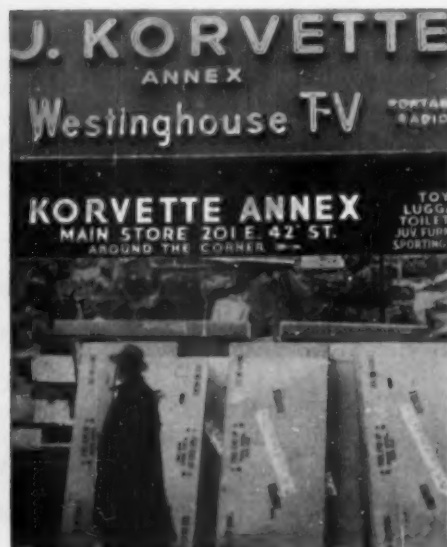
But St. Nick, though he lines the pawnbrokers' pockets at Christmas, hasn't been doing such a hot job the rest of the year—or for that matter over the past 10 years generally. The fact is the pawnshop—at least the variety grandpa knew—is dwindling fast.

All around the country, the post-war toll of pawnshops has been high. In Los Angeles there are some 80 hock shops today, compared with 120 only 10 years ago. In the same period, St. Louis' pawnshop community has shrunk by one-third; New York has only 130 licensed pawnshops, compared with 150 at the end of World War II.

• **Consumer Financing**—What's happening to the pawnshops is simply a reflection of what has been happening to consumer financing and to consumers themselves. The consumer is much better heeled, and all sorts of institutions and people are now in the business of catering to his fiscal wants. As a result, not only are many pawnshops dying, but the survivors are changing drastically in character. More and more the hock shop is becoming just another retail store. Some shops do as



HOCK SHOPS have fallen on evil days in postwar years. Many are either going out of business altogether or turning to retail selling to boost income. Three growing factors in the business scene are the biggest reasons for pawnbrokers' woes:



DISCOUNTERS like New York's E. J. Korvette Co. are hurting the important retailing end of the hock shop business.

Gets Less Cheery for Hock Shops

much as 80% of their business in retail sales; the lending on jewels, gold, furs, or other collateral has been pushed into the back of the store.

Two factors are working to speed the decline and transformation of the hock shop:

Competition, particularly from small loan companies and discount houses. Credit jewelers, secondhand dealers, and credit unions all figure in, too.

Regulation. Pawnbrokers argue that their license fees—around \$500 a year in most cities—are unnecessarily high, particularly when compared to the fees charged competing institutions. They add that the interest rates they can charge have been kept too low for too long, especially since operating costs have shot up since the rates were established. In most cities, rates run 30% a year on loans of less than \$100, and 18% for loans more than \$100.

The biggest reason for the pawnbroker's woes is the postwar scramble for the "little man's" loan business. Before the war, small loan companies were more limited geographically than they are today. Banks did almost no small loan business. Today, banks battle with the small loan companies for business, with hefty advertising a major weapon—and the hock shop is the biggest loser in the struggle.

"The small loan company has definitely cut into our trade," says a St. Louis pawnbroker. "At Christmas and income tax time, people used to pawn like mad. Now they can go to a small

loan company or a bank and merely sign their names." An added factor is the withholding tax, which has lessened the need for tax loans.

• **Hit Two Ways**—The discount house, which has caused so much grief for retail merchants generally, is another newcomer that has wounded the pawnshop. David F. Cohen, lawyer-pawnbroker and head of New York's Pawnbrokers Assn., says, "The advent of the discount house has affected both the loan and sales departments of the pawnbroking business. The small pawnbroker cannot compete in his retail sales of new goods with the prices of the discount houses. Nor can the pawnbroker afford to make the loan requested on a customer's pledge, when a discount house is selling a similar article at that figure or not much more than the loan sought."

In Detroit, the discount house is fingered as the No. 1 villain. A pawnbroker in the city's Skid Row says, "Our business is down 50% since the good years of 1952-1954, and the discount houses are mostly to blame." He goes on to say, "Unless those guys in Washington wake up, they're going to have a lot of trouble on their hands with discount houses. Pretty soon there won't be any legitimate business left."

• **Credit Unions**—Detroit, and other cities with a heavy industrial concentration have spawned another foe of the pawnbroker—the credit union, whose low-cost loans to members have cut into the hock shop's lending trade.

It's the pawnbroker's retail trade that takes the lumps in New York, where jewelry is the top item in his inventory. Credit jewelers, selling on time, have hurt him there. And everywhere, the secondhand dealer—who often does a side business in buying up pawn tickets—has cut into the hock shops by selling the same types of merchandise at drastically cut rates.

• **Reaction**—The pawnbroker's response to these competitive challenges has been, "If you can't beat 'em, join 'em." A San Francisco proprietor says, "The trend is more to straight retail trade. If small loan companies continue to increase, the number of hock shops will probably decrease." In Chicago, a loop pawnbroker peers sadly at the crowds of Christmas shoppers scuttling past his door, and sighs: "The pawnbroking business has fallen by the wayside. We've seen this coming since the early 1940s, and our business is becoming more and more retail as a result."

A handful of shops, however, with their roots deep in the past, have refused to go into retail selling. Take R. Simpson's, one of New York's oldest shops, and the last operated by descendants of one of the original Simpsons, a famous pawnbroking family. R. Simpson's runs a strictly pawn business behind its quiet, unadorned 42nd Street exterior. Inside, the shop is like a bank—long counters, attended by old pros in the pawnshop business, dressed very much like bank clerks. Simpson's will lend only on pre-



PERSONAL LOAN companies, lending up to \$500 on signature alone to almost anyone with a steady job, are putting a serious crimp in the pawnbrokers' lending business, as are . . .



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cious metals or gems, takes no furs or anything else. It probably has more capital than any other New York shop, "running well into seven figures" according to the estimate of one competitor. The shop makes many large loans to Social Register—and long-standing—customers. Simpson's say it will stick to the business it knows best; perhaps blessed with plenty of capital and a blue ribbon customer list, it can survive.

• **Economics**—The business cycle, of course, affects pawnbroking. But, while every hock shop operator will agree that business fluctuates with general economic conditions, it's much harder to strike an accord as to just how the pawn business fluctuates. A St. Louis pawnbroker says, "Those shops that are left do better in good times than bad." But a Chicago man says, "I think only a major depression could revive the pawnbroking business."

Generally it's thought that hock shops do better when times are tough presumably because people have to do more pawning. But New York's David F. Cohen points out that in a deflationary period the value of collateral depreciates, and the amount that can be loaned drops. Because collateral must be kept for at least a year before it can be auctioned, values can drop sharply before the pawnbroker can do anything about it. Of course, redemptions are way off in bad times, leaving him still more at the mercy of falling values.

In a period of inflation, the number of loans usually drops off because, as a San Francisco pawnbroker says, "People have more dough." A Chicago "uncle" agrees: "In good times—like today—any man with a job can get a loan from a bank, small loan office, or a credit union."

• **Bigger Loans**—Right now, tight money has meant a slightly higher volume of large, business loans for some of the bigger pawnshops. In Chicago and New York, particularly, pawnshops have been called on to make bigger loans, with more valuable collateral.

While there is still some stigma attached to doing business in a pawnshop, most operators seem to feel the public has accepted them much more than in the past. In some areas, the old, cluttered front with three balls prominently displayed has given way to a modern, retail-store type of facade, with the pawnbroking end soft-pedaled.

• **Durable**—Despite the down trend stressed by the nostalgia that attends the closing of such a venerable institution as McAleenan's in New York many pawnbrokers think the hock shop will always be with us. "The regulars don't change," says one Los Angeles pawnbroker. "As long as there are poor people, there'll be hock shops," says a St. Louis operator. **END**

In Finance

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Alcoa Plans \$125-Million Public Offering Next Month to Help Finance Expansion

New corporate offerings scheduled for next month were swelled by three big chunks announced this week.

Aluminum Co. of America will start off 1957 with a hefty piece of new debt financing. Early in January, it plans to offer to the public \$125-million 25-year sinking fund debentures, with the deal to be midwived by a large underwriting group headed by Wall Street's First Boston Corp.

Alcoa continues to need big gobs of new money for its plant expansion program. The company spent over \$635-million from Jan. 1, 1951 until last Sept. 30 to meet the postwar increase in the demand for aluminum and aluminum products, but additional facilities that have already been authorized are expected to absorb at least another \$270-million by the end of 1957.

Proceeds of the new offering will be used to retire \$50-million of short-term bank loans and to handle part of 1957's expansion costs. The rest of the 1957 bill, Alcoa reports, will be paid out of "cash flow," plus bank loans.

Phillips Petroleum Co. will tap its stockholders for \$171-million via a sale of convertible debentures. Rights to the new issue will be offered in a ratio of \$100 of new debentures for each 20 shares of common stock held . . . Armco Steel Corp. will also be seeking funds from its stockholders, but Armco plans to sell \$65-million of common stock, representing over 1-million shares. The shares will be offered at the rate of one new share for every 10 shares held by stockholders of record Jan. 9, 1957.

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New York Official Asks Fed

To Delay Ruling on Bank "Merger"

New York State's superintendent of banks, George A. Mooney, has formally asked the Federal Reserve Board to defer action on the proposal of New York City's First National City Bank (and its affiliated City Bank Farmers Trust Co.) to "merge" with the County Trust Co. of suburban White Plains. The plan calls for formation of a holding company organized under new federal laws (BW-Nov.17'56,p54).

Mooney asked the Fed to wait at least until the legislature, now studying the banking situation, had an opportunity to act on revising the banking laws. The superintendent assured the Fed that postponement would do "no irreparable damage" to the applicants, since the Joint Legislative Committee seems close to expressing its views on the subject.

Mooney's letter expressed no objection to holding companies generally. But he made it clear that, for this one, he objected especially to the Fed's contention "that the Bank Holding Company Act of 1956 does not require

the applications in question to be submitted to me for my views." After all, he noted, two of the banks in question are state chartered. He argued that this made it mandatory that the state authorities be consulted, even though the banks have in the works application for national charters.

Mooney also argued that if the Fed O.K.'d the present application, other local banks would have to seek mergers in order to meet competition. And, to avoid the "procedural maze" in present state laws, they would do their merging by shifting from state to national charters. This, he said, would seriously threaten the state's dual banking system.

Mooney assured the Fed that other banks were already showing interest in such moves, not because they loved the holding company gimmick as such, but because of "a desire to obtain suburban branches" via "ulterior or 'back-door' action."

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Phone Rate Boost in Pennsylvania Granted—After a Heavy Slash

Telephone rates in Pennsylvania won't be hiked anywhere near so sharply as appeared possible earlier.

Last week the state public utility commission pared down the rate increase filed in March by Bell Telephone of Pennsylvania from \$37-million to \$13.5-million. This decision upheld, at least in part, the strong objections raised at public hearings by cities and by the state's CIO council. It was the largest cut ever made by the commission in utility-proposed rate boost.

A major factor in the decision appears to have been major differences with Mother Bell's subsidiary over the "fair value" of the properties involved—always an important factor in setting a rate base. The commission at midyear set this value at \$675-million, sharply less than the company had contended.

The commission says the boost it did grant—the third major hike approved in seven years—will give the company a 5.90% return on its "fair value" findings. The company had been shooting for a return ranging from 6.50% to 6.75%. The groups fighting its original proposal had urged a return to net over 5.50%

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Maine's Turnpike Joins the List Of Toll Roads Having Troubles

The toll road picture, already clouded by a slumping bond market, some discouraging revenue performances, and a drastic slowing up of new plans since the Federal Highway Act was passed last summer, darkened a little more this week. William B. Getchell, Jr., executive director of the Maine Turnpike Authority, reported that 1956 gross revenues will fall some \$1,050,000 short of engineers' estimates, and that the road probably will not have sufficient revenues to meet this year's interest needs. Last winter's heavy snowfall and rainy summer weekends were blamed for the lower-than-expected revenues. The deficiency in interest will be made up from reserves.



Arkansas: State Perked Up by



ON THE SPOT visits all over state, often by plane, typify approach of Rock, Ewald.

Most states have commissions to solicit new industry. They vary in technique, competence, and success, but the Arkansas Industrial Development Commission is distinct in at least one respect: Its chairman is a Rockefeller.

Winthrop Rockefeller, one of the five sons of John D. Rockefeller, Jr., left New York in 1953 to build himself a magnificent, \$1.5-million Santa Gertrudis cattle farm atop Petit Jean Mountain, just west of Little Rock. When the Arkansas General Assembly created AIDC in 1955, Gov. Orval E. Faubus and legislators had him in mind for the seven-man commission.

Rockefeller took the job. He had been looking for a role in which he could contribute to his new home state; industrial development "seemed a natural." Ignoring the futility felt by

previous plant hunters in Arkansas, he made his determination felt at once:

- Since it was evident that annual appropriations of \$127,500 would be inadequate, he enlisted a state-wide committee of 100 to scratch up another \$200,000 for two years.

- Although the legislature had provided for only one \$8,000 man to run the commission staff, Rockefeller hired a two-man team of professionals with a good reputation, and used donated funds to pay one \$20,000 and the other \$12,000.

- He signed dozens of letters to prospects, telephoned others to let them know he was available to help, entertained some at Petit Jean, and exhorted the natives to contribute to AIDC and prepare their towns for plants.



ROCKEFELLER, in casual attire, confers in office (left photo) with William Rock (left), William Ewald, Jr. (center).



INDUSTRY is helped to find sites by Rock (left) and industrial engineers, who become thoroughly familiar with map of Arkansas for companies' benefit.



GOVERNOR Orval Faubus (behind desk) has supported Arkansas industrial development all the way. Here Rock asks for help in the legislature.

Rockefeller

• **Results**—In the 18 months since AIDC has been in business, Arkansas has gotten good mileage out of his name.

Manufacturers like to think they decide plant locations without being susceptible to sales talks and ads. But they do admit that Rockefeller's name arrested their eyes and prompted a second look.

In Arkansas, his ingratiating personality has also won people to his side. At first, to be sure, they suspected he would leave his mountain for the East any day. When he stayed, he convinced them. People came to hear his speeches because they were curious to see what a Rockefeller looked like. More than any other member of his famous family, he attracted them with the common touch gained from his oil



PLANNERS, such as these Little Rock planning commissioners, listen to Ewald (second from left) and his team on how to lure new plants to state.



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(Story starts on page 74)

field roughneck work and farming—and impressed them with his evident unselfishness.

I. The Hillbilly Legend

Fortunately for the have-not state of Arkansas, the right man came along at the right time.

For years, Arkansas had been losing population. The increase of births over deaths could not offset the departures. Mechanization of cotton farms threw people out of work. Industries, few and mostly low-paid—lumber, apparel, furniture and leather—could not attract workers. College graduates could not find the positions for which they were qualified.

In most statistics—income, education, population—Arkansas usually joined Mississippi behind the other 46 states. And cartoons of Ozark hillbilies only magnified the picture.

• **Then Came War**—World War II brought arsenals, aluminum plants to process Arkansas bauxite, and military bases. War also took Arkansas' sons out of the state.

It was then that, under the leadership of C. Hamilton Moses, president of Arkansas Power & Light Co. [BW—May 30 '53, p. 72], a group of businessmen got together. They wanted to preserve this manufacturing employment in postwar years and they wanted to develop the state so that her GIs would have reason to come home. The result was the Arkansas Economic Council, with Moses as president, which merged with the State Chamber of Commerce, undermanned but with an \$11,000 bank balance.

A council survey of war plants found that 89% of their workers were Arkansans and hoped to stay. A survey of employers showed that the number of jobs available after the war would approximate the size of the labor force.

• **Outside Helpers**—The power company engaged the Midwest Research Institute of Kansas City to do a county-by-county study of Arkansas' resources. AP&L sent copies north to industrial prospects, took other copies to each county to go over the findings and propose what they should do.

The economic council-state chamber was designated by the Committee for Economic Development as the agency in Arkansas to bring industry and education together, and got a Carnegie Corp. grant for a series of studies into problems that were handicapping Arkansas' growth.

• **Too Little**—These efforts were successful to some extent, as reflected in Arkansas' slight improvement in the statistics. But there was a feeling the state should do more.

It was also the time of the gubernatorial campaign of 1954, in which Orval Faubus was running uphill to deprive Gov. Francis Cherry of the customary second term. Faubus, sensing a state-wide desperation for more pay-rolls, campaigned for industry. Surprisingly, he won—and then had to produce.

Gov. Faubus and Arkansas lawmakers agreed that the state's Resources & Development Commission, with industry only one of several functions, had done an inadequate job on industrialization. They determined to set up the separate Arkansas Industrial Development Commission.

II. The Governor's Answer

To serve as the commission's right arm, and to help communities as well, they created an Industrial Research and Extension Center at the University of Arkansas in Little Rock.

The act also provided for local industrial development corporations in the communities to finance construction of plants. Under the scheme, the town must raise at least 20% of the cost. The state was authorized to buy bonds equal to 40%, and \$1-million was set aside for the purpose.

• **New Team**—When he and six other commissioners had been appointed, Rockefeller went to look for a director. His brother, Laurance, mentioned two men with the Baltimore Assn. of Commerce, William P. Rock and William R. Ewald, Jr. Rock, a former industrial development man from Commonwealth Edison in Chicago, and Ewald, an alumnus of the Detroit City Plan Commission, worked as a team. Rockefeller decided to employ both.

The legislature had earmarked \$52,500 of Parks & Publicity Commission funds for AIDC's advertising. But Rock and Ewald said they would need \$100,000. So Rockefeller formed the Committee of 100, to raise funds to supplement appropriations.

In national advertising, written by Ewald, the commission wanted to change the nation's image of Arkansas—which hadn't been improved by such earlier ads as the one that, to illustrate the state's transportation facilities, depicted a hobo atop a box car.

Says Ewald: "We wanted to indicate the dignity and progressiveness of Arkansas, to dispel the jokes. We didn't want our ads to look like other states'. So we made ours contemporary and dignified."

Within the state, dailies and weeklies contributed \$50,000 worth of space for a 13-ad campaign in which AIDC explained what it was doing, asked towns to submit lists of potential buildings, plant sites, and prospects, and urged them to primp for industrial

prospects that might come to call.

• **How to Win Friends**—All over Arkansas staff members, Rockefeller, and the committee of 100 were busy soliciting funds, peppering up communities, and impressing on them the necessity of planning. They told stories such as these:

• How West Memphis lost plants because of its night clubs and cluttered appearance.

• How Jonesboro lost out in some cases because it didn't have enough sites designated.

• How an electronics plant failed to come to Little Rock because it has no engineering school.

• **Salesmanship**—In going after companies, Rock, Ewald, and their industrial engineers used a highly professional approach. Instead of train junkets or wild doorbell ringing, they built files of industries that might be contemplating expansion and asked them if Arkansas was included in their thinking. If not, the matter was dropped. If yes, AIDC went to work.

One AIDC man would be assigned as a contact man, to do what the prospect wanted. He would select the potential sites that suited the client best. In the process, AIDC irritated some communities, which felt left out. But the commission impressed on the client it was working for him—and Arkansas.

If the prospect wanted to be introduced to townspeople, he was. If not, the town never knew it was under scrutiny. If the prospect wanted some study of the market, labor, power, etc., AIDC put in a request to the university's research center.

When Yale & Towne Manufacturing Co. wanted a definite highway commitment before deciding to build a plant at Forrest City, AIDC went to bat before the State Highway Commission. Even former Gov. Cherry, whose town (Jonesboro) had lost the plant, testified; he had appointed the commission.

III. Pointing with Pride

How successful AIDC has been is hard to say. Tactfully, it does not claim credit for any plant. It only says that during its first 12 months there were announcements of 73 new plants, employing 7,236 persons, and 50 expansions, employing 3,195.

It is fair to say that in many respects Arkansas now is where other states were years ago. But, still, its approach has been notable. One manufacturer who has announced a new plant says he was impressed by the Rockefeller name on literature—but he decided in favor of Arkansas because of its supply of adaptable labor.

Another was impressed by the AIDC's almost limitless authority. "They have no political control over

them," he said. "They are definitely career people, running the commission as a high-powered private enterprise kind of deal."

"When we wanted a survey, they delivered it in person. And they don't hit you with a broadside like some states and ask you to screen 500 towns."

• **Gripes**—AIDC's success in Arkansas is recognized, but in this kind of operation—particularly when run by outsiders in a small state—animosity and jealousy are inevitable.

There are towns that industry has passed over—they probably don't realize why—and are sore at AIDC. There are legislators who would prefer to use state money for their own pet projects. Some businessmen wonder about the effects of higher-paid, unionized jobs.

There are also hints of competition for AIDC from the power company and the state chamber.

• **Bigger Allowance**—While riding its popularity crest, AIDC will ask the legislature next month to raise its annual appropriation from \$127,500 to \$489,000. No longer able to depend on donations, it wants to expand its staff from 10 to 29 (with a section to help existing businesses) and to enlarge the advertising budget to \$170,000 a year.

Despite scattered opposition, AIDC seems sure to get its money. Possibly, the re-election of Gov. Faubus last month reflects the people's attitude toward AIDC's work. For Faubus will support AIDC, and also may go along with recommendations AIDC is going to make as a result of the university's studies. (Example: equalize assessment of local property taxes.)

• **Common Complaint**—AIDC also will put before the legislature another problem that handicaps its work—and Arkansas' industrialization: scarcity of money with which communities can build plants for leasing to industry.

Unfortunately, much of AIDC's life span has been a period of tight money. The local corporations have pretty well exhausted their sources. A new proposal, which has yet to jell, will be for a private corporation to lend money to existing businesses, new firms, and local development corporations. It should start with \$10-million—half in bonds bought by the state and half by institutions.

• **Five-Year Plan**—Where do AIDC and Rockefeller go from here?

Rockefeller, Rock, and Ewald have talked in terms of results in five years, hoping then to have per capita income much closer to the national average (it's now 57%). Already, Rockefeller is gratified that the Census Bureau says Arkansas has stopped losing population. If the next four years really produce results, Arkansas may get all the industry the people want. **END**



RIGHT HAND in research to AIDC is W. Paul Brann (left), associate director of university's industrial research center.



SPEECHES to civic groups are frequent for Rock (on podium) and Ewald. This is a meeting of county tax officers.



NIGHT often finds Rock still in office studying new ways to attract industry—and to bring Arkansas income up to average.



Cecil B. DeMille, Producer-Director of *The Ten Commandments*, a Paramount Picture in VistaVision

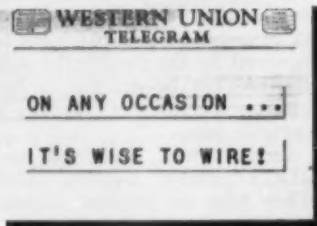
Lights, camera, telegrams—DeMille stages his greatest production

When Cecil B. DeMille films a Technicolor screen achievement like *THE TEN COMMANDMENTS*, the telegram is very much in the picture. In situations where a day lost in shooting can cost many thousands of dollars, the telegram gets things done *fast*—prevents misunderstandings. It would be impossible for Mr. DeMille to sum up all the things the telegram has done for him during his 44 years in movie making.

And Mr. DeMille is in good company. More than a million times a day business finds it

wise to wire. Telegrams quote prices, confirm orders, route shipments. Speed plus the written record make the telegram essential to American business.

DO YOU KNOW about these other Western Union services? *Operator 25* tells customers where to buy what an advertiser has to sell . . . *Private Wire Systems*: custom-built to tie together the widespread branches of a business . . . *Hotel Reservation Service*: just tell us where and when and we'll make sure there's a room waiting for you.



INTERNATIONAL OUTLOOK

BUSINESS WEEK

DEC. 22, 1956



By this time next year, 1956 may look like the watershed year in postwar history. Already it's clear that there have been two tremendously important (and interrelated) developments during the past year:

- Starting with the Poznan uprising in Poland last June the Soviet empire in Europe started to disintegrate. Today Moscow is in the worst jam it has been in since Hitler turned the Stalin-Hitler pact against Russia.
- This autumn, as a result of the Hungarian revolution and the Middle East crisis, the U. S. began to use its power and prestige as never before—to reach for a Pax Americana that would go down with the democratic nations of Asia and with a non-imperialistic Russia (page 26).

The disintegration of Soviet power in Eastern Europe is going on at several levels. It's hard to tell which process counts for most.

The economic integration of the Soviet empire has broken down pretty completely, blasting Moscow's hopes of achieving the ambitious goals of the current Soviet Five-Year Plan. All Soviet efforts to repair the damages are being stymied by a new force in Eastern Europe—the revolt of the industrial working class against all aspects of the totalitarian state.

Moscow's strategic position in Eastern Europe has been drastically altered. The Russians have lost, for all practical purposes, the use of 60 satellite divisions. They find themselves today in a particularly exposed position in East Germany.

Here's what is happening in Eastern Europe:

In Hungary the armed revolution seems about over. But a new danger threatens Soviet power—one that frightens the Kremlin even more than the armed uprising. It is the unprecedented tactics of the underground workers council movement. The leaders of this movement are (1) refusing to mine any coal for the state until the Soviet army leaves Hungary; and (2) threatening to blow up the mines if Soviet forces make any moves to take them over. The Russians already have had experience with this kind of opposition in some of Hungary's uranium mines.

In Poland the cold revolution moved a stage further this week with the signing of a Soviet-Polish military agreement. This gives the Poles the right to limit the Red army's freedom of movement. But this concession won't end Moscow's troubles in Poland. If the Gomulka government is to stay in power it will need increased economic aid from Russia—or from the U. S. However, if Moscow allows Gomulka to get aid from Washington, there's a danger that he will follow in Tito's footsteps as to foreign policy.

In East Germany there's a shortage of coal, largely due to the lagging output in Poland. This, plus a workers slowdown movement, is threatening the economic balance in East Germany. From Moscow's angle, the worst economic problem is a drastic reduction in machinery deliveries from East German plants.

In the other satellites Moscow is taking unusual security precautions. For example, the Romanian army is being disarmed.

At midweek you still couldn't tell how and when the Suez Canal would be cleared. Much to the disgust of London and Paris, U. N. Secy. Gen. Dag Hammarskjöld seems to be following Pres. Nasser's dictates on the clearance problem.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

DEC. 22, 1956

There are also differences within the Eisenhower Administration on this question. Some of the President's advisers want Eisenhower to make a flat "let's clear the canal" statement. But the State Dept.'s Middle East experts seem to feel that this might upset Nasser, hurt our long-term interests in the area.

Note, though, that some Middle East observers predict that, regardless of any niceties, Nasser's price for playing ball will be a cool \$2-billion.

Washington isn't paying much attention to Nasser when it comes to economic assistance for members of the Baghdad Pact.

A substantial set-up in U.S. economic aid for Turkey, Iraq, Iran, and Pakistan is in the works and will be announced within the next month. Just how much more aid eventually will be offered will depend upon how fast the countries concerned can draw up plans for regional economic development projects.

The Administration fears that the Baghdad Pact—which still is regarded as an element of stability in the Middle East—will collapse under pressures from Egypt and the Soviets if it is not bolstered quickly by the U.S. But Washington is not willing to join the pact or to give it any more military backing. In fact, Eisenhower in his talks with Indian Prime Minister Nehru this week pointedly de-emphasized the military aspects of the pact and stressed its economic and political importance.

The new aid program has other political implications. The Administration is anxious to use economic aid wherever practicable in the Middle East in general to promote political stability. So it wants to make the Baghdad partnership a showpiece of the advantages of Middle Eastern countries working together in partnership with the U. S.

Additional U. S. aid funds will go primarily to regional economic projects involving one or more Baghdad countries. In the U. S. view, there are great needs and potentialities for greater regional economic integration. (Only 10% of the members' trade is with each other—which is low for an area of about 100-million people with geographical, political, and cultural ties.)

The area has potentially large complementary resources that U. S. experts feel could be developed more efficiently. Turkey has a sizable manufacturing base for a Middle Eastern country. Iraq and Iran have vast oil resources. West Pakistan's important mineral resources have barely been tapped.

Possible regional projects that the U. S. may help finance include inter-connecting road and railroad systems to tie in with existing national transportation networks, improvement of regional communication, possibly pipelines from Iraq to the west through Turkey and even from Iran to the east via Pakistan.

Westinghouse International Co. (BW—Sep.8'56,p148) has just taken the lead in the international race to sell atomic reactors. WEICO signed a deal this week to provide Edison-Volta of Milan, Italy, with the first big commercial reactor to be exported anywhere in the world. It's a 134,000 kw. job, costing \$35-million—the same size as the Westinghouse reactor that's being delivered to Yankee Atomic Electric Co. at Rowe, Mass.

THE WORDS GO OUT in polyglot profusion. Translated in language and form, they appear as print in a newspaper. Paper is an impartial recorder. It takes the news of a world conference, the baseball scores, the names of the ladies who made cakes for the church bazaar and makes history of them all. But for Bowaters, the largest manufacturers of newsprint in the world, that is only part of the story. They take timber and convert it. It may reappear as packaging, carrying goods as varied as candy and radar tubes across city, continent and ocean . . . or as hardboard, insulating panels . . . even paper tissues. These are products which are increasingly called for in a world of rising standards. Bowater mills and factories in the United States, Canada and Europe are producing them in ever-growing volume. This 40-company organisation is now engaged on an international development program under which new mills, factories, plant and ocean-going ships are being built to match the shape of tomorrow's demand.

The harvest of the forest is given many forms by Bowaters

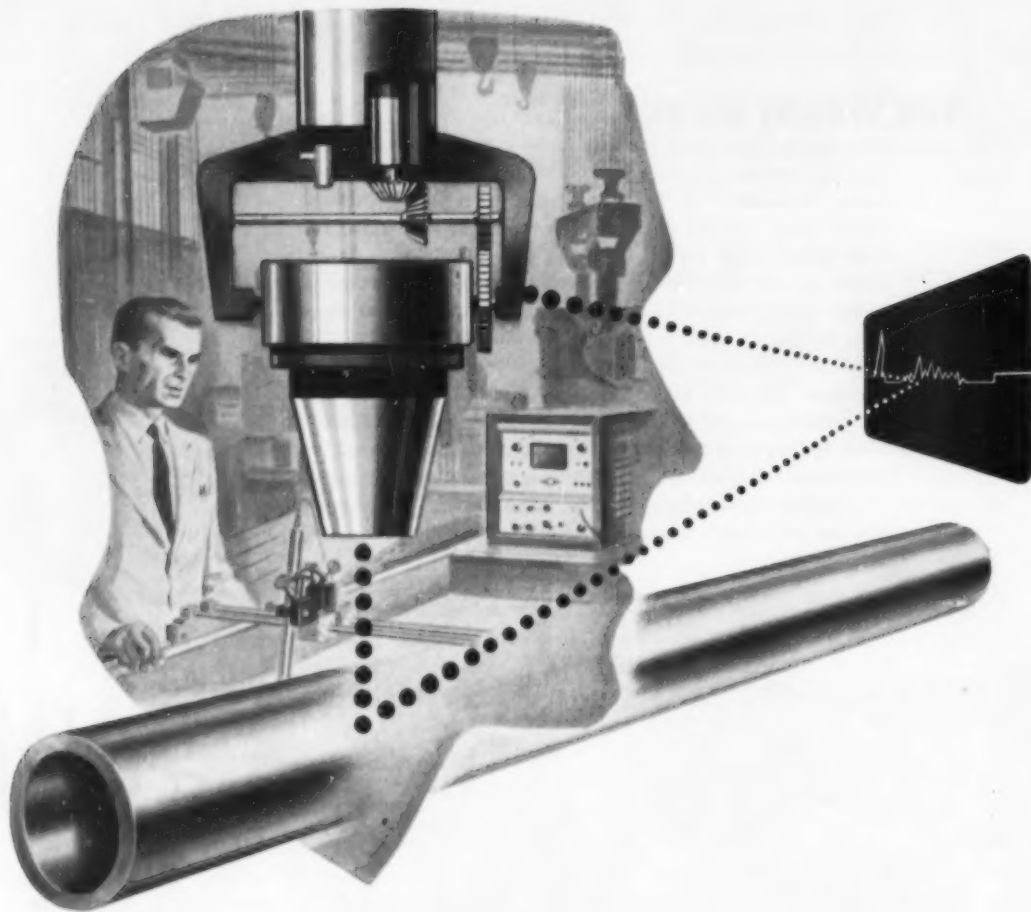


THE BOWATER CORPORATION OF NORTH AMERICA LIMITED

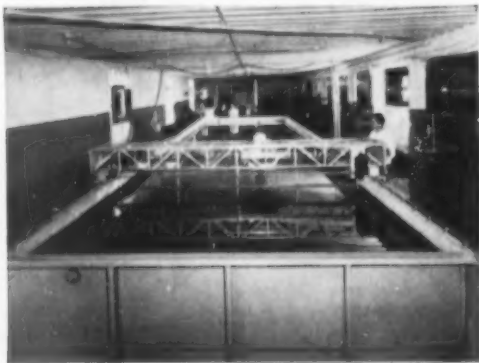


. . . co-ordinating, from Montreal, these Bowater activities . . . at Calhoun, Tennessee, installation of third high-speed machine at world's fastest-producing newsprint plant and a new 120,000,000 sq. ft. capacity fiberboard mill . . . at Rockhill, S. C., a projected sulphate pulp mill . . . at Corner Brook, Newfoundland, one of the world's largest (and still expanding) pulp and paper mills . . . in Nova Scotia, plans for a 100,000 ton pulp mill in the vicinity of Mersey Paper Company's newsprint mills, Bowaters' newest interest.

UNITED STATES OF AMERICA CANADA GREAT BRITAIN AUSTRALIA SOUTH AFRICA REPUBLIC OF IRELAND NORWAY SWEDEN



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An engineer once said: "With ultrasonic inspection, you're finding the invisible with the inaudible—but it's infallible."

Curtiss-Wright's Non-Destructive Ultrasonic Test Equipment uses high frequency mechanical vibrations—far beyond the range of human hearing—for precision production-quantity inspection of forgings, rolled plate, welded tubing and other metal products. The "sound head"—immersed in water—sends out vibrations that penetrate the metal under test and bounce back. Flaws show up on a cathode ray tube . . . and, simultaneously, a built-in alarm system sounds.

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In Washington

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Stockholders Will Get More Data

On Status of Merger-Bound Companies

The Securities & Exchange Commission this week decided to press a proposed change in its rule to guide stockholders of a merger-bound company in voting on the proposed merger.

SEC announced a Jan. 17 hearing and set a Jan. 15 deadline for written comments and requests to testify on its proposed revision of Rule 133, the so-called "no sale" rule in effect since SEC's founding in 1933.

Under present rules, securities offered for public sale must be registered with SEC. A similar requirement holds for proxy solicitations and "voluntary exchanges" of stocks between a corporation and security holders in another corporation. But registration is not required when the exchange of stocks is carried out through merger, consolidation, reclassification, or transfer of assets. Because of the exemption, SEC contends, stockholders often are not given adequate data about the acquiring company whose stock they are asked to accept in exchange for their own holdings.

The SEC proposal—which has drawn criticism from business and financial groups—in effect would do away with the "no sale theory" that exempts securities of merging corporations from registrations with SEC.

SEC says "it has been increasingly clear that the 'no sale' rule has become an instrument of evasion of the law."

• • •

Government Keeps Its Fingers

On Last Synthetic Rubber Plant

The government this week rejected bids by Publicker Industries, Inc., and Union Carbide & Carbon Corp. for a long-term lease on its Louisville alcohol butadiene plant—the last synthetic rubber facility remaining in government hands. But the Rubber Producing Facilities Disposal Commission wants Congress to give it another chance to sell the plant next year.

The commission will ask that the idle plant—rated at 87,000 tons per year of butadiene—be taken out of the rubber defense reserve, and that it be used for any product that has a wartime value. Any future sale would become effective when Publicker's lease expires April, 1958.

• • •

High Court Rulings Range Widely

From Price Discrimination to Drought Control

The U. S. Supreme Court had one of its busiest weeks as it took action on a wide range of cases:

- It agreed to take another look at the Federal Trade Commission's years-old case against Standard Oil of Indiana for price discrimination. This time, the court will

decide whether the company has proved that it was meeting competition in good faith when it gave some of its customers a lower price than others got.

- It approved a temporary increase in the flow of water from Lake Michigan to the Mississippi River—through the Chicago and Illinois Rivers—to help raise the water level that has caused a serious jam-up of Mississippi barge transportation (BW—Nov. 3 '56, p42). Wisconsin and other Great Lakes states are against any increased tapping of the Lakes although experts say the increased drainage might lower the Lake level by only an inch.

- By declining to review a lower court ruling, the high court left standing a decision approving a showing by Harper & Bros. that the company had charged higher prices to one of its customers because of the higher costs involved in selling to this customer. This is one of the few cases in which the "higher cost justification" defense of the Robinson-Patman Act has been successfully used.

• • •

Hearings on Tighter Money Policy

Pave Way to Broader Investigations

Rep. Wright Patman of Texas, who is slated to be the next chairman of the Joint Committee on the Economic Report, announced this week that he favored a "thorough re-examination of our entire monetary system."

This came as an aftermath to the two-day hearings Patman conducted on the Federal Reserve's tight money policy (BW—Dec. 15 '56, p34). The idea of a Presidential monetary commission, composed of outstanding private citizens, was aired at the hearings by Elliott V. Bell, editor and publisher of *BUSINESS WEEK*.

Patman differed with Bell in requesting that the re-examination be carried out by a "joint Congressional monetary committee assisted by outstanding qualified experts in the field of banking and public finance." As he sees it, Congress has an "inescapable constitutional responsibility" over the U. S. monetary system.

• • •

White House Weighs Pros and Cons

Of Fast Write-Offs, Steel Priorities

The much-argued need for another round of rapid tax amortization for many industries—steel particularly—is up for White House decision again next week. So is the question of government priorities or allocations to guarantee steel supplies for a stepped-up tanker building program.

Most experts figure the odds are against both proposals. Key officials in the Cabinet and Congress are still against renewing the special tax aid. More than \$2-billion in plant expansion is covered by applications already in the hands of the Office of Defense Mobilization.

On the other hand, ODM gave lead and zinc producers concrete assurance that government support purchases of these domestic metals will continue.

ODM Director Arthur S. Flemming says that emergency stockpile purchases of the two metals—started 18 months ago—will be continued on a month-to-month basis for an indefinite period.



SKILLED

vs.

UNSKILLED



LABOR

To Prevent

Nation's biggest industrial union, fearful of splitting, invents new bargaining plan and new trouble for employers.

The United Auto Workers—the union that always seems to be breaking through new frontiers—has initiated a new approach to collective bargaining. Its purpose is to bargain twice, instead of once, with every auto manufacturer when new contracts are to be negotiated. This means two sets of demands, instead of one, two negotiations, two contracts, and—conceivably—two strikes. The auto industry is shocked by this development.

UAW is not necessarily embracing this new strategy because it likes the idea. It's been forced to the strategem as the best it could think of to assuage a bitter antagonism that has been growing within its ranks and that might—if not ministered to—split the whole organization.

• **Discord**—The dangerous division in UAW is between the skilled and unskilled employees it represents.

For every four so-called production workers in UAW, there is one who works at an apprenticeable trade. The pay differential between the two may be very wide: A production employee earns, on the average, up to \$2.30 an hour; for a skilled hand, the sky's the limit.

There is another significant economic difference. The production worker's employment record is ragged. He's laid off and recalled as the industry's sales and output fluctuate in response to seasons, market conditions, and acceptability of new models. The craftsman, however, is protected from most of these vicissitudes. And in this period of shortages of skills in the labor market, many employers tend to keep him on the payroll even if there is not a full job for him to do.

• **Days of Yore**—In an earlier period of UAW's history, the different economic interests of the production and skilled groups were submerged. When wages were low, a common purpose was to get them raised. There were few quarrels.

But then other matters than wages became important elements in collective bargaining: paid vacations, pensions, medical insurance, hospitalization—and last year, a form of the guaranteed annual wage.

For each of these new obligations the union imposed on employers, it made,

Revolt, UAW Takes New Tack

for all practical purposes, a contribution of its own in the form of receiving smaller wage increases. Thus, 1955's big auto settlement, worth an average of 21-22¢ in added labor costs, provided an average hourly wage increase of 6.2-9.7¢ with an added 8-10¢ for the skilled. All the rest was for improved welfare provisions and supplementary unemployment benefits.

• **Unwilling Buyers**—Although 1955's contract was a monumental one, UAW had a very tough time selling it to its own members—or rather to its skilled worker members. Articulate and vociferous, they set small value on all the welfare gains—feeling, presumably, that they could afford to provide such protection for themselves. They wanted more wages (BW—Jun. 25 '55, p158).

Of course, the production worker wants more wages, too. But he sets a higher value on the non-wage provisions. It's a question of how the pie is to be divided. After having tried to divide it to satisfy everybody, and meeting little success, UAW's officers have decided to let the two groups within the union divide it for themselves.

Hence, the new bargaining policy, devised at a national union conference last week in Chicago. It provides:

- Skilled-trades workers will elect their own representative to the union bargaining committee, to operate as the representative of the skilled trades.

- The union will negotiate a "supplemental" agreement to the master contract for skilled trades only.

- Skilled-trades workers will be permitted to ratify their own agreement.

- **Heresies**—These are fundamentally startling proposals to come from UAW—the evangelist of industrial rather than craft unionism. Only little more than a year ago, the auto union rejected closely similar proposals—partly on the ground they would tend toward a revival of separate unionism. The proposals will be equally startling to management, when it has had a chance to weigh them and project their effect.

I. Unionism for All Workers

Unionism in the auto plants started with craft groups. But it made no headway until skilled workers—with Walter Reuther a leader even then—set out in the late 1930s to organize all the workers into an industrial union. A strike of General Motors tool-and-die workers in 1939 established—in UAW eyes, at least—the union's right

once and for all to bargain for all GM workers.

- **Bulwark**—Yet UAW's growth, power, and financial resources have mainly sprung from the unskilled production workers. These are the people, making less than 70¢ an hour 20 years ago, whom UAW has bargained up to \$2 an hour or more. These are the people, subject only 20 years ago to capricious layoff and advancement and discharge as "too old" at 40, for whom UAW has obtained seniority, job protection, pensions, and, in 1955, some measure of wage security during layoffs.

The skilled trades shared the benefits. Higher wages, seniority, paid vacations, pensions—all applied to skilled as well as unskilled. But within the ranks of the union in recent years a hair-line crack developed and was widened by a combination of economic, social, and bargaining factors.

Since the war, cyclical layoffs in the auto industry have nearly vanished for the skilled workers, particularly the tool-and-die men—the largest single group of craft workers in the UAW—while continuing and growing in severity of effects among production workers. At the same time, the wage differential between skilled and unskilled, once about 50%, narrowed, according to some estimates down to about 35% now. This became a grievance to the journeyman, who is proud of his position as the elite of the blue-collar work force. Higher wages are the only real way for him to manifest his superiority.

- **Detonator**—The catalyst that brought about the skilled workers' reaction was the union's 1955 bargaining emphasis on a guaranteed annual wage. There is no question but that skilled workers favored GAW as much as the production workers, when it was voted as the number one goal of the 1955 UAW negotiations. But the skilled people either didn't realize or didn't know that getting a GAW meant a smaller direct wage increase. UAW's 1955 package has been estimated at 21-22¢. In addition, the skilled workers got an average wage increase of 8¢ an hour, far short of what they thought they had a right to.

In June, when the contracts were signed, the skilled workers could look back on about 10 years of practically continuous overtime employment and feel disenchantment with layoff benefits, in lieu of fatter paychecks and pensions. Even while the contracts were being ratified by Ford and GM workers, the skilled men struck, and it took

every ounce of persuasion and prestige the international could muster to get them back on their jobs.

- **Live Issue**—Since then, the skilled workers have never let the issue die. In Flint, a "Society of Skilled Workers" was organized to attempt to obtain bargaining rights for the crafts. It has all but died under the international's assault on "dual unionism." In Detroit, particularly at Ford's big Local 600, the skilled workers formulated a series of demands on the union's international executive board. A key point was a proposal for "bargaining rights as supplementary to the main agreement, . . . to be ratified by skilled workers only . . . to . . . supplement . . . the main local contract."

In its first reaction, the executive board rejected this recommendation "because it believes it is a craft union approach to the collective bargaining problems of our skilled-trades workers . . . in direct violation of the constitution of our union. . . ."

- **Changing Its Mind**—Now, however, UAW has taken this same basic approach but adapted it and fitted it into the concepts of industrial unionism. Looking ahead to the 1958 bargaining and even beyond, UAW sees where the supplemental agreement and greater autonomy for its skilled trades can be a potent weapon to obtain even more benefits for its members. That is apparent in the union's statement of policy on a "skilled trades program" and the details of that program."

II. Program for Problems

At Chicago last week, the union's Skilled Trades Dept. recognized that its growth and technological advances in the industry (automation) have brought new problems. "Properly taken advantage of, these new problems can be turned into even greater opportunities," it noted.

One opportunity: abolition of the "merit spreads" in the skilled trades. Two skilled men, of equal seniority and doing the same work, may now get different wages. UAW wants the spread ended and the higher wage to become the new base, with bargaining to go on from there. This would go far toward cleaning up the complaints about the shrinking differential between skilled and production workers.

To give this and other proposals substance, however, the union needs a stronger bargaining arm. That's where the greater autonomy for the skilled peo-

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PROVIDE
100%
ELECTRICAL
FLEXIBILITY



In your floors with
**REINFORCED
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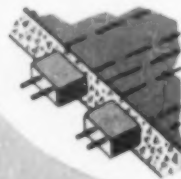


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**"... skilled-trades workers
would be permitted the
right to strike . . ."**

STORY starts on p. 84

ple comes in: "Apprenticeable skilled trades and related workers, members of our union, shall be permitted separate voting on matters pertaining only to their trades and classifications. They would continue to vote in the general unit on matters common to all of the workers." And: "Since employers quite often are not influenced simply by voting, it is also necessary to provide that under prescribed circumstances skilled-trades workers be permitted the right to strike. . . ."

• **More Power**—All this implies a louder voice for the skilled trades in negotiating contracts. In the past, skilled workers were on the union bargaining teams but were elected as representatives of their plants or locals. Next time, however, they will be elected as skilled workers to argue for the skilled workers.

The result at the bargaining table, UAW hopes, will be a supplemental agreement to each master contract to deal with specific matters concerning the skilled trades. The merit spread is one such. Another is apprentice training and apprentice ratios—and this may be one of the most important.

On this point, the new policy says, in effect: As new machinery eliminates unskilled jobs, open the trades to some of the unskilled men.

• **Employer Woes**—Disclosed only by indirection in the policy statement is a hornet's nest for the employer. The union could shoot at the bargaining table for two separate and unrelated gains—one for production workers, and one for skilled workers. Take 1955 as an example. If UAW's dual bargaining concept had been in action then, the union could have negotiated for a GAW for production workers only, and for some other major goal—say company-paid worker relocation—for the skilled workers only. If it got both, the next time around it could reverse the order, on the basis of experience and precedent.

III. Heads We Win

It is not by happenstance that the skilled workers' policy statement recalls the 1939 GM tool-and-die strike and points out that in 1953 a strike of production workers "brought about substantial gains for skilled tradesmen."

If UAW were successful in getting the companies to bargain for separate agreements, it would double its chances of winning all its bargaining goals. The production workers could accept their contract, but if the skilled trades struck,

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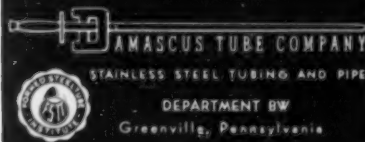


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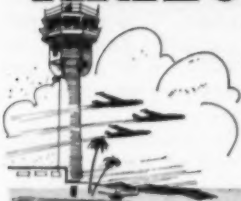
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"... UAW'S new idea kicks the lid off Pandora's box for itself, too..."

STORY starts on p. 84

the plants would go down anyway. Management's bargaining position would be weakened; it could not offer great gains for production workers at the expense of lesser gains for the skilled workers, or vice versa.

Industrial relations officials of the auto companies will not comment on UAW's new plan, because, in itself, it is a bargaining point. But they do indicate that what the union proposes is entirely new.

• **Questions for Union**—But if, with its new idea, UAW creates complications for management, it kicks the lid off Pandora's box for itself, too.

Perhaps the greatest problem is this: How do you keep the skilled workers—who vote separately on their own agreement, and who ask the international executive board directly for strike permission—responsible to and under the authority of the local unions? This would not be a matter of widespread concern to UAW, except in certain cases, such as Local 600.

Local 600 claims something better than 40,000 members. Probably as many as one half are skilled workers, organized as units within the local, and they were leaders in the fight to obtain more bargaining power. With the skilled unable to act independently of Local 600 leadership in some very basic areas of unionism, wouldn't it be just a question of time before the skilled units were in fact separate locals? And would this weaken Local 600's bargaining power with the company?

• **Paradox?**—And what about the seeming contradiction of what would be essentially craft locals within an industrial union? UAW spokesmen, while recognizing the validity of such questions, de-emphasize their long-range importance. UAW has a heritage of being united when the chips are down, and the international leaders obviously think that unity of purpose (their song is "Solidarity Forever") will overshadow any incipient factionalism—especially if the skilled workers, the elite of the union, are happy.

There is a larger frame in which to ponder UAW's plan. With more plant operations being mechanized, the number of unskilled jobs is declining. In calling its Chicago conference, UAW's Skilled Trades Dept. pointed to the "steadily increasing ratios of skilled workers to production workers." So this, in itself, would be sufficient reason for the UAW leadership to propose dramatic new methods of bargaining for the skilled trades. **END**

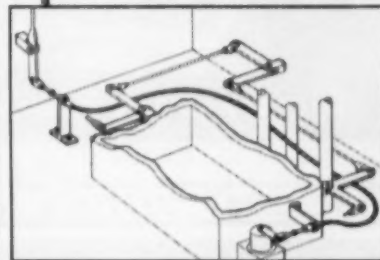
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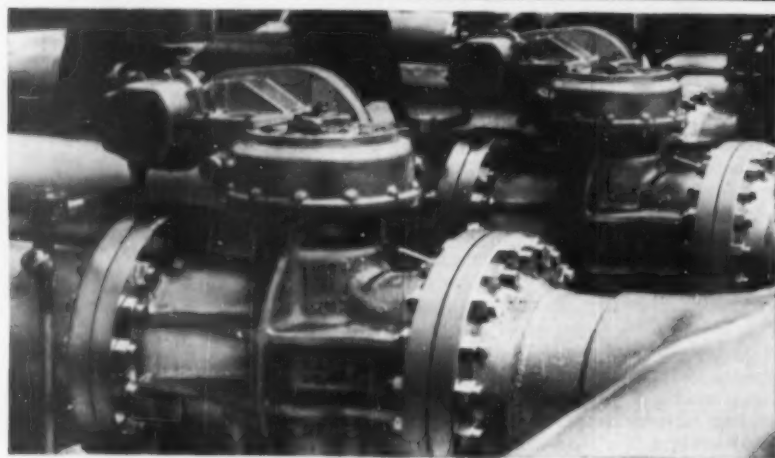
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Not as Rumored

Newspapers were off base when they guessed the Administration would ask new T-H emergency rules.

Rumors published this week reported a new Administration plan for amending the national emergency strike section of the Taft-Hartley Act, but they are without foundation.

The rumors can be traced to a press conference at which Secy. of Labor James P. Mitchell wondered aloud about the efficacy of the injunction that's keeping East and Gulf Coast longshoremen from striking (BW-Dec. 1'56,p135). No serious bargaining has gone on since the strike was enjoined, and Washington is worried lest the stoppage resume because no agreement is reached during the statutory 80 days that the injunction runs.

Mitchell observed that maybe it would have been better if, after the first 10-day restraining order, the government had not sought the longer-term injunction, holding it back as a threat instead. From this remark, reporters "doped" a new Administration idea for T-H amendments that would authorize the government to get an injunction at any time it wanted for the full 80 days all at once or for a series of shorter periods.

▪ **Misinterpreted**—That interpretation made news, and there was no check-back with Mitchell. Thus it was published, and employers, unions, and congressmen wondered if a big new fight over Taft-Hartley was coming in the 1957 session.

The fact is that neither the President nor Mitchell will ask for any changes in the national emergency strike provisions of the law. They will propose the same changes that were put before the last session of Congress, including one that would allow men on strike for wage increases to vote in representation elections. This would eliminate the so-called "union-busting" provision that unions strongly oppose in T-H.

Other changes in the law might be recommended later. A special labor-industry committee from the construction industry is considering, at the Administration's request, special building trades problems that have arisen under T-H. The committee is informally mulling over possible amendments or, as an alternative, a special labor law covering the construction industry as the Railway Labor Act covers railroad and airline employees.

Mitchell also plans to urge Congress to expand minimum-wage coverage, possibly to include large retailers. **END**



Quiet benefits all employees at New York City's Columbian Carbon Company. A noise-muffling ceiling of Armstrong Arrestone quiets the accounting machine room, while all other general and executive office areas are sound conditioned with ceilings of Armstrong Travertone.

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The need for quiet, efficient working conditions is prompting more and more businessmen to include noise-absorbing ceilings in their remodeling and building plans. Budget limitations, however, sometimes restrict acoustical treatment to those office areas where the need seems the greatest.

In some companies these areas are the general offices, where large concentrations of personnel and business machines create loud and disturbing noise levels. Other firms install acoustical ceilings in their private offices only, feeling that the executive needs to concentrate more intensely than the average employee.

Whenever possible, however, most companies prefer to sound condition their entire offices. They realize that a secretary's error, often caused by distracting noises, can be as harmful to a business as that of an executive.

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In Labor

. . .

AFL-CIO Readies Its Arguments To Win Over White-Collarites

AFL-CIO's campaign to unionize 13-million white-collar workers will open with a public relations program planned to tell them why they should be in unions.

Details of what may be a long, careful drive in a thinly organized field were discussed at a conference of the federation's Industrial Unions Dept. last week (BW—Dec. 8 '56, p163). Employers, watching closely, received clues to the arguments to be used in soliciting white-collar memberships.

As outlined by IUD's president, Walter Reuther, the arguments for unionization are:

- White-collar salaries, which once led factory wages, have fallen behind.
- Too many office employees are being "paid off with high-sounding titles," instead of proper salaries.
- "Red apple" promotions, based on favoritism rather than on regular promotion schedules, are "far too common."
- Women white-collarites aren't being paid the same salary as men doing comparable work in many places.
- White-collar people aren't "protected" by a seniority system.
- There is no grievance machinery for office-workers, says IUD; each white-collarite is left on his own in pressing complaints to management.

. . .

AFL-CIO Election Post-Mortem Turns Up a Scapegoat

In its continuing post-election assessment of its 1956 political action, AFL-CIO has now reached a number of conclusions. Among them are the discovery of a scapegoat and the acknowledgment of the emergence of a formidable personality who can influence the labor vote.

As the current issue of the AFL-CIO News puts it: "The conservatism and stubbornness of Southern Democratic Congressional committee chairmen imposed an enormous handicap. . . ."

And, "The most effective GOP campaigner, next to Eisenhower himself, was probably Labor Secy. James P. Mitchell. . . ."

. . .

Portsmouth Gets Phone Service But CWA Strike Continues

Limited local telephone service was restored in Portsmouth, Ohio, this week, despite a continuing strike against the Ohio Consolidated Telephone Co. Meanwhile, public sentiment was growing for pressure to end

the long walkout of the Communications Workers of America (BW—Oct. 20 '56, p28).

Ohio Consolidated resumed operating its automatic exchange on Monday, but only 4,500 of 15,000 telephones were reactivated. The others weren't operating because of cut cables.

The company closed its manual and automatic exchanges on Oct. 15 after a near riot due to a labor dispute. When the automatic exchange reopened, 20 supervisory employees moved in—to eat and sleep there until the danger of violence is over. Tension continued high, and police allowed only persons living in the area to approach within six blocks of the exchange.

. . .

7,600 Hormel Employees Will Split \$5.1-Million

Geo. A. Hormel & Co. last week earmarked a record \$5.1-million for 7,600 employees covered by two funds.

Hormel distributed nearly \$2.6-million under its joint earnings program, giving each employee a check for 3.417 times his basic 40-hour weekly paycheck.

At the same time, the company put \$2.5-million into the Hormel Employees' Profit-Sharing Trust, which provides retirement benefits for employees. Hormel workers' individual accounts will be credited with sums varying from \$49.95 to \$2,200, with 770 persons receiving the top figure.

Money put into the profit-sharing account belongs to the employee, who can accumulate a maximum \$20,000. The worker can draw the money in a lump sum on retirement or on quitting Hormel, or he may draw it out on some monthly basis. Beneficiaries get the money if the employee dies.

. . .

Labor Briefs

Labor newscasts attract a radio audience of 3.5-million persons each night, according to Morris Novik, AFL-CIO's radio-television consultant. The figure is from an independent listening survey agency. The federation presents Edward P. Morgan as commentator on 170 stations, John W. Vandercook over 100. Ten newscasts are broadcast weekly.

Ringling Bros has reached contract terms with the American Guild of Variety Artists for the 1957 season. The pact, covering performers, is expected to clear away labor problems that plagued the circus this year (page 29).

Factory earnings nudged up a cent more in November, to an average \$2.03 an hour, and reached \$82.42 a week, the Dept. of Labor announced last week.

District 50 of the United Mine Workers plans to challenge the Seafarers International Union in Canadian Great Lakes ports next spring. Some 50,000 seamen in Dominion coastal and inland waters are the long-range goal, but District 50's first target will be 1,500 lost to SIU two years ago.

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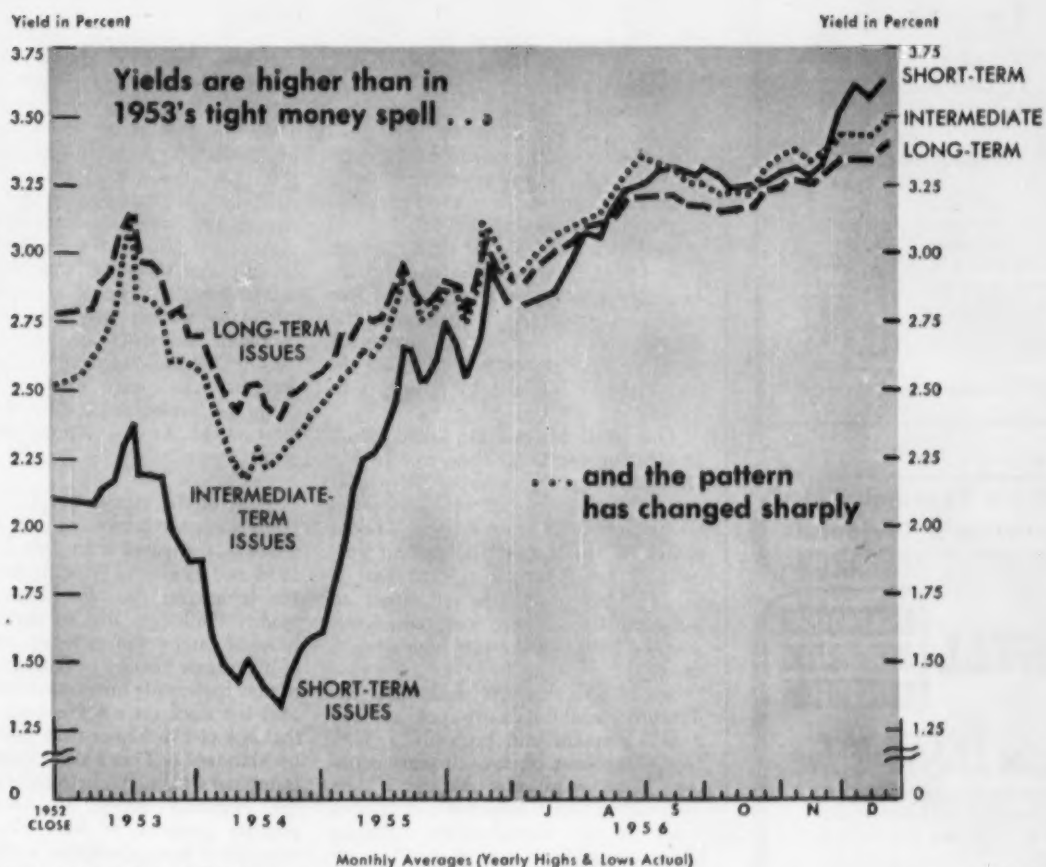
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THE MARKETS

The Treasury Market:



Data: Standard & Poor's Weekly Bond Yields.

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Governments Feel the Squeeze

While the stock market continued its rally pianissimo, and prices began to turn slightly upward in the corporate and tax-exempt bond markets, the market for U.S. Treasury securities continued this week to plummet to new depths. Prices for U.S. government issues struck successive historic lows—pushing yields to new highs (chart)—and no one was betting prices would get any better very quickly.

The poor performance of governments is surprising when tax-exempt and corporate bonds are edging away from their lows. Ordinarily, U.S. Treasury issues are the bellwethers for the rest of the debt market. Now—and for the next few months at least, according to Wall Street's bond dealers—government bonds have lost that role.

Thus, dealers say, it would be quite possible to have a price revival in tax-exempt bonds over the next few months and a moderate upturn in corporate bond prices, while government issues stayed in the doldrums. They add that this condition couldn't last very long, but that it might provide the same sort of temporary distortions of yield that happened a few months ago when governments leveled out of a decline while other bonds were selling off heavily.

• **Competition**—One big reason why governments have parted company with other bonds is that they appeal to much the same buyers—the institutional investors. Tax-exempt and corporate bonds are selling now at yields so much more attractive that these investors are

spurning the safety feature of the governments.

Then, too, investable funds in general are at an ebb, due to the record-breaking demand for money all through this year. This leaves buyers with little interest in governments. As prices have slumped, yields—which move inversely to prices—have risen to historic peaks, but bond dealers say that they are just now moving into line with other yields.

• **1953 Comparison**—Individual long-term government issues showed striking gains in yield this week. Yields on the Victory Loan 2½s moved to 3.50%, while prices on the 3½s of 1978-1983 dropped so low as to provide a yield of nearly 3.45%. A quick look at yields on these two issues at the height of


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the money pinch of 1953 shows how much tighter the market is today: The 2½s then sold at prices yielding around 3.25%, and the 3½s, which were sold early in 1953, yielded 3.37% at their peak that year.

The short-term sector of the Treasury market has been hit hard, too, as evidenced by the 23-year high of 3.331% average interest the Treasury had to pay for its latest weekly offering of 91-day bills.

• **Tighter Yet?**—The high bill rate has aroused Wall Street fears that the Federal Reserve might again increase its discount rate—the rate that member banks pay to borrow from the Fed. This is the peak commercial bank lending season, and the Fed has kept the rate at 3% while supplying the system with funds to meet record demands. But some bond dealers fear that, once the holiday rush is over, the Fed may want to bring the discount rate more in line with the bill rate by raising it to 3½%.

This sort of market would cause trouble for the U.S. Treasury. In last December's weekly offerings, the average interest cost for three months was \$6.40 per \$1,000 on bills; this week it comes to \$8.27. And the current government bond market is such that if the Treasury wanted to sell either an intermediate-term or a long-term issue, it would have to put a very high coupon on it.

Some bond experts feel that the Treasury would have to put at least a 3½% coupon and probably a 3¾% tag on any issue of, say, 20 years maturity. One man says bluntly: "The Treasury couldn't even sell a long-term bond in this market—with anything like a reasonable coupon, that is."

• **Prospect**—When market conditions will loosen up depends largely on two factors, say the bond experts:

- How the Fed acts in coming months with regard to money rates.
- How heavy the volume of corporate and municipal borrowing will be. (Right now, it looks like another peak year.)

If the Fed decides its major objective is to combat inflationary pressures brought about by expected peak money demands from industry and labor, and keeps credit tight, the Treasury could find itself with some headaches.

The rise in money rates will cost the Treasury an estimated \$300-million more in interest next year than was originally budgeted. It has nearly \$35-billion of securities maturing next year, besides the \$20-billion or so of bills always outstanding. If all these securities have to be rolled over—or if any further attempts are made to shift them into longer-term issues—the Treasury might be facing the most unresponsive market of the past 35 years.

Wall St. Talks . . .

. . . about declining profit margins . . . C.I.T. borrowing costs . . . blaming tight money.

Eying the 1957 prospects, Wall Street's Francis I. du Pont & Co. comes up with this pertinent comment: "How much business is important . . . [to stockholders] . . . but how much profit is equally significant." Thus, "the decline in profit margins by leading entities is a disturbing factor." Because the decline already reflects inability to boost prices to cover rising labor and material costs, "the wage agreements calling for further pay hikes [in 1957] in major industries are an important consideration in analyzing . . . [earnings potential] . . . even under continued boom . . . conditions. Any decline in sales could have a serious effect on profits."

Signs of the times: C.I.T. Financial Corp.'s average borrowing cost this year was 4%, compared with only 2.75% in 1954 and 1955. . . . Trading in raw silk has ceased on the New York Commodity Exchange, due to malnutrition brought on by the growing popularity of man-made fibers. . . . A large offering of new high-grade tax-exempt bonds was sold last week on a 4.4% basis, a yield that is ¼ of 1% higher than that offered by Standard & Poor's daily index of 50 industrial stocks. To help sell them also the borrower added an increasingly popular gimmick of late: The bonds were made non-callable as a whole before 1967 for refunding with a lower-couponed issue.

Whipping boy: Streeters are noticing a marked tendency among corporate officials to blame tight money for most of the unhappy things that befall them, especially when optimistic forecasts of sales and profits fail to pan out.

Market letter gleanings: "Investment policy of stock investors should be geared to the probability of uneven and sometimes lower markets" in 1957. (Moody's Stock Survey) . . . Look "for continuation of extreme selectivity for possibly all of 1957." (Walston & Co.) . . . "Prospects still favor . . . (some further recovery) . . . but in terms of the D-J industrial average, probably 85% of this has already been accomplished." (Reynolds & Co.) . . . "Caution and careful analysis are called for in new purchases and, generally speaking, reserve buying power continues . . . desirable." (Standard & Poor's Outlook).



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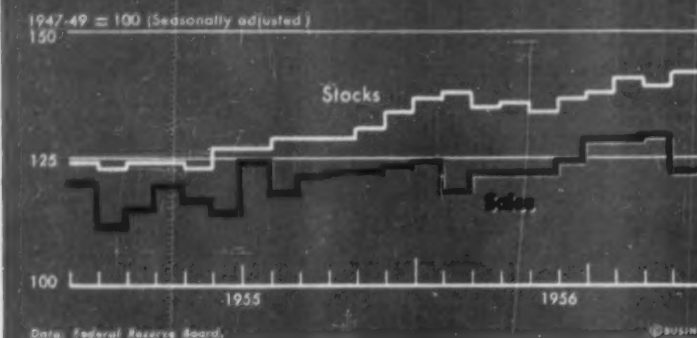
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CHARTS OF THE WEEK

Department Store Sales and Stocks

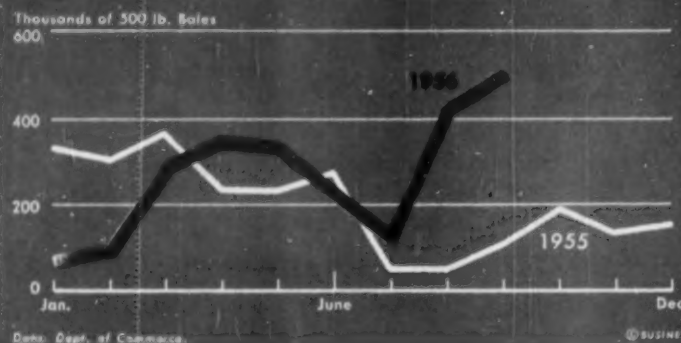


So Far, More Stocks Than Sales

The spread between sales and stocks at department stores after seasonal adjustment widened in October. Sales dipped 5% below September levels. At the same time, inventories at the end of October rose to a new seasonally ad-

justed high of 142% of the 1947-49 average — up 2% from the preceding month and up 10% from Oct. 31, 1955. With Christmas sales off to a slow start this year, it will take brisk last-minute selling to balance sales and stock.

Cotton Exports



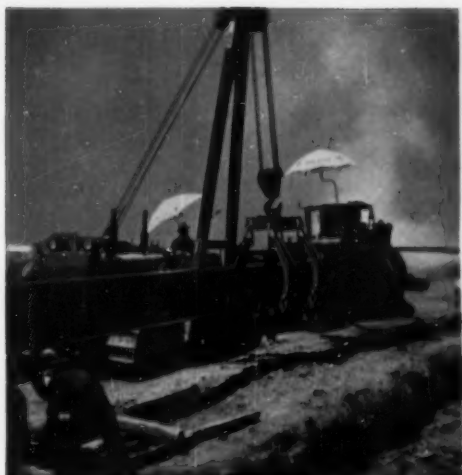
Coming Out of the Doldrums

There has been a marked change in the cotton export picture. Exports turned sharply upward in August with the new export subsidy, then climbed to 505,000 bales in September — the highest for the month since 1939. Exports last season were among the poorest for any modern peacetime year — 15% below 1955 levels. However, the Agriculture Dept. expects sales during the 1956-57 season (which began Aug. 1, 1956) to be the largest of any season since

1933-34's 7½-million bales. This would help reduce the record 14½-million-bale surplus.

Foreign buyers cut their operating stocks to the bone during the 1955-56 season, waiting for the new U. S. export program. Now they buy at about 6½¢ a lb. under the pegged price here.

Export demand is strengthened too by international tension. Meanwhile, Russia is expected to continue taking much of Egypt's output.



**Vital
protection . . .**

**...for a very
vital
operation!**



WE'LL bet the chief cook at your house has never seen a big inch gas line—let alone one being coated with coal tar enamel. Yet, that fraction-of-an-inch of tough, durable protection against corrosion is one of the reasons why she can always depend on her natural gas supply . . . and at a reasonable cost, too.

Coal tar coatings are the best practical protection the pipeline industry has found for its multi-million dollar investment in underground transmission lines. Pipelines laid a quarter of a century ago have been unearthed and found in perfect condition, thanks to their impervious coal tar "skins."

Today, oil and gas lines all over

the nation are being protected with Pitt Chem coal tar coatings, one of the principal products of Pittsburgh Coke & Chemical Company's Protective Coatings Division. These hot-applied coatings are known for their uniform top quality and ready availability in grades for every application and service condition.

On another corrosion-fighting front, Pittsburgh recently introduced *Tarset*, the first relatively low-cost cold-applied coating ever developed to effectively protect equipment against crude oil corrosion. *Tarset* also shows exceptional promise in combating severe chemical and marine corrosion.

If you have an unusual corrosion

problem, perhaps you'll find a practical answer in the versatile family of Pitt Chem protective coatings. Let us acquaint you with the unique advantages of buying your coal derived products from Pittsburgh, a basic and integrated producer.



WSW 6117



American Metal Products' Board Chairman Fred Matthaei outlines a fact business itinerary to pilot, as his personal helicopter rises from his Ann Arbor, Mich. estate. Photo by Carter Jones.

Here, the excitement of the busy week

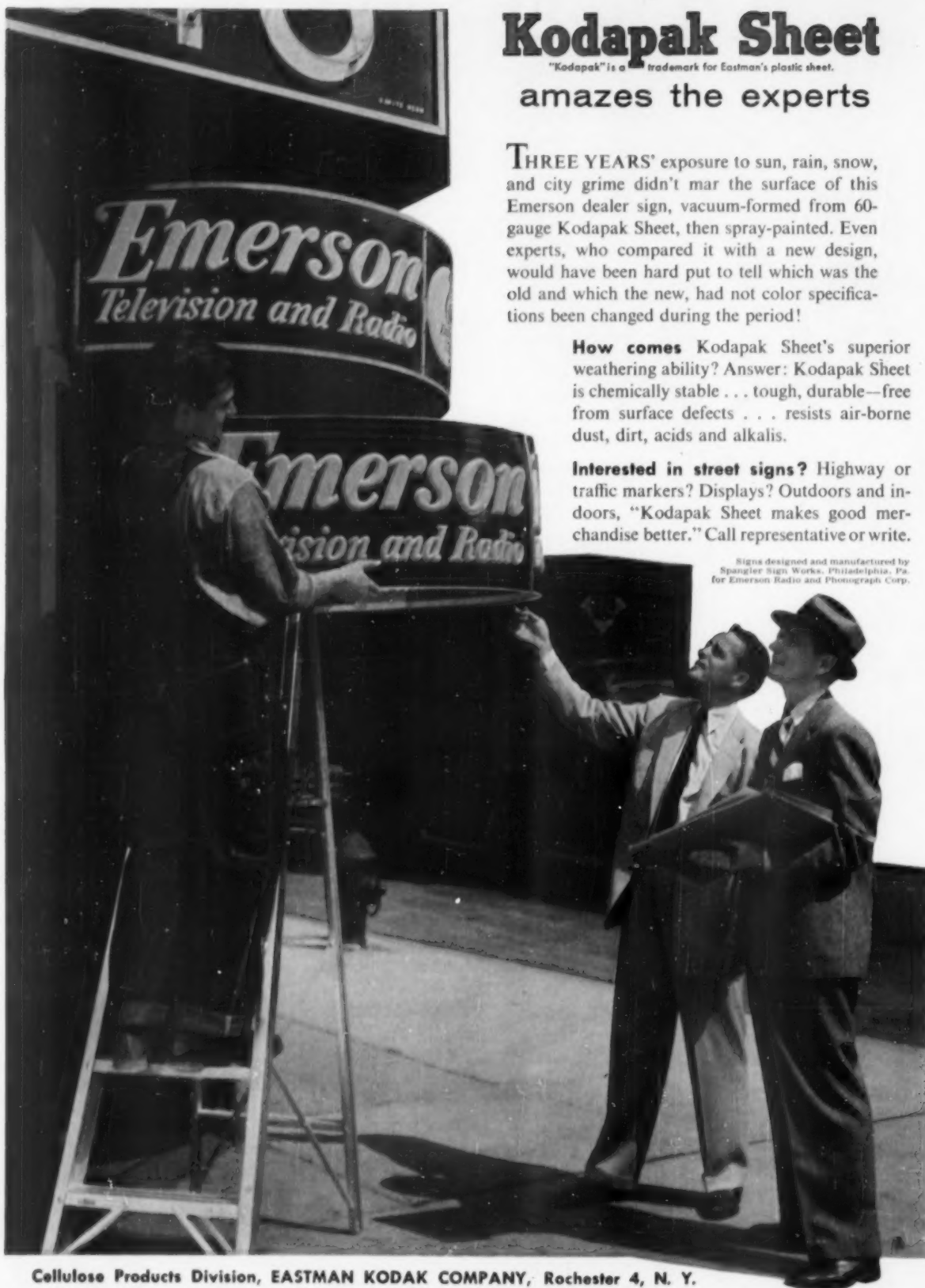
Weekend diversions are past... Monday dawns, fresh, clear, promising... early birds of business poise for flight...

The difference between Business Week and generalized magazines is the difference between Monday and Saturday, the sheer excitement of first flight into the busy week versus the weekend round of diversions. This is why Business Week is not a "something-like-something-else". Other magazines that can do other things better have neither time nor space to do what our editors do so well: to balance the books for the week just closed... to report current business on all fronts — production, marketing, money, labor, Washington, the world... to "go on ahead" for its busy readers. To the 91% of our subscribers who are management men, there just isn't a more exciting story. To the companies that swell our unchallenged advertising volume, there is no more rewarding atmosphere... for selling is done in the busy week, and *sales come easier where excitement comes naturally.*

A McGraw-Hill Publication
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YOU ADVERTISE IN BUSINESS WEEK WHEN YOU WANT TO INFLUENCE MANAGEMENT MEN



Kodapak Sheet

"Kodapak" is a trademark for Eastman's plastic sheet.

amazes the experts

THREE YEARS' exposure to sun, rain, snow, and city grime didn't mar the surface of this Emerson dealer sign, vacuum-formed from 60-gauge Kodapak Sheet, then spray-painted. Even experts, who compared it with a new design, would have been hard put to tell which was the old and which the new, had not color specifications been changed during the period!

How comes Kodapak Sheet's superior weathering ability? Answer: Kodapak Sheet is chemically stable . . . tough, durable—free from surface defects . . . resists air-borne dust, dirt, acids and alkalis.

Interested in street signs? Highway or traffic markers? Displays? Outdoors and indoors, "Kodapak Sheet makes good merchandise better." Call representative or write.

Signs designed and manufactured by Spangler Sign Works, Philadelphia, Pa. for Emerson Radio and Phonograph Corp.

Cellulose Products Division, EASTMAN KODAK COMPANY, Rochester 4, N. Y.

Sales Offices: New York, Chicago, Atlanta. **Sales Representatives:** Cleveland, Philadelphia, Providence.

Distributors: San Francisco, Los Angeles, Portland, Seattle (Wilson & Geo. Meyer & Co.); Toronto, Montreal (Paper Sales, Ltd.).

PERSONAL BUSINESS

BUSINESS WEEK

DEC. 22, 1956



If you're visiting Washington soon—for the inauguration next month, or for business or family sightseeing—you may need to brush up on hotels, restaurants, and after-dark entertainment. For those in the know, wining and dining and transient living in the Capital are better these days than most people realize. But others are likely to be nettled by many bewilderingments, including the old unwritten law that the town goes to bed at eleven:

Washington's hotels have one thing in common—they're more expensive than in most other cities. Aside from that, they're a varied lot.

The three newest—each good in its way—are the Statler (downtown), the DuPont Plaza (edge of downtown), and the Woodner (out in the Northwest quarter). They are modern, efficient, convenient, without a trace of Capital atmosphere—which may or may not please you.

In size, service, and atmosphere, the three big name hotels in Washington still are the Shoreham and the Sheraton Park (both halfway out in the NW quarter) and the Mayflower (downtown).

- The **Shoreham** is newly renovated, sophisticated, cheerful—rated No. 1 by many who know Washington. Among the residents you're likely to see there are Sens. Byrd, Magnuson, Murray, and AEC Chmn. Strauss.

- The nearby **Sheraton Park** is the old Wardman Park, modernized by its new owners. It's the Capital home of Chief Justice Warren, Defense Secy. Wilson, Postmaster Gen. Summerfield, and Sens. Bush, Carlson, Holland, Smith, Thyne, and O'Mahoney.

- The **Mayflower**, still a hub of activity, social and political, may be the Capital's most fascinating hotel. Such men as Justice Reed and Sens. George, Williams, and Bricker make it their home in Washington.

Downtown, the old-line house of luxury is the **Sheraton Carlton**, relatively small but long a landmark of gracious—and expensive—living. Then there are the Willard, quiet and conservative, the oldest big hotel in town; its next-door neighbor, the Washington; and the Hay-Adams, quiet and refined. Beyond these, you strike mostly typical tourist hotels.

For business executives who fly in, a huge new motel, the **Marriott**, will be convenient. It opens next month on U. S. 1 near National Airport and the Pentagon, with 360 de luxe units, restaurant, swimming pool, barber shop—everything but a bar (in Virginia).

Restaurants in the Capital are better than a few years back. Some of the old places have perked up, and a few names have caught on. **Top-ranking steak and seafood houses downtown** include: The Occidental, where you may see important people; Duke Ziebert's, with a lively atmosphere; Fan and Bill's, something like Lindy's in New York; Olmstead's, a long-established house that closes early. Men like Cannon's Steak House, in the market district and Hall's seafood house near the waterfront.

French and Italian restaurants downtown are expensive but good: La Salle du Bois, sophisticated French, formal, reservations recommended; Place Vendome, congenial, excellent French cuisine; Colony, French-Italian cookery, formal dining, with an appealing cocktail lounge and piano downstairs; Ristorante Italiano, small but cheerful, good food. L'Espionage, in Georgetown, serves good French food in unusual surroundings, attracts mostly a younger group. Normandy Farm in Potomac, Md., 15 miles from town, offers superior country dining in a French provincial setting.

Old Washington atmosphere lurks in places like these: Harvey's (down-

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

DEC. 22, 1956

town), in its 98th year; Billy Martin's (Georgetown), a full array of beef and seafood, interesting locale; Collingwood (5 miles out in Virginia), candlelight dining.

For family dining in a Pennsylvania Dutch atmosphere, try the Water Gate Inn, on the Potomac near the Lincoln Memorial. Or if you're out driving with your family, the Brook Farm Restaurant in Chevy Chase, Md.—chicken, roast beef. For Chinese food, The Good Earth (downtown, behind the Mayflower).

After 11 p.m., life in Washington is a bit sad, as always. The Shoreham offers dinner and supper dancing in two lovely rooms, best in town; the Statler has a smallish club for dancing; the Old New Orleans (downtown) is cheerful, with a small show downstairs; there's a pleasant supper club called the Silver Fox (out in NW) that has music—and that's just about it.

Liquor is served in Washington until 2 a.m. weekdays, until midnight Saturdays; only beer and wine on Sundays. Bottle stores are open until 9 p.m. weekdays, until midnight Saturdays, closed on Sundays. Liquor is comparatively cheap at these stores—no fair trade prices.

P.S. You can skip those downtown clubs that advertise exotic shows. Nearest good ones are in Baltimore.

Time is running out if you haven't as yet lined up tickets for events of the inaugural weekend in Washington. Here's a review of major activities—plus a few suggestions covering tickets and invitations:

Jan. 19—A festival starring Hollywood and Broadway personalities; tickets from \$3.50 to \$12. Order from the Inaugural Committee, 1022 15th St. N.W., Washington, D. C.

Jan. 20—An evening Inaugural Concert by the Washington Symphony; tickets from \$4.50 to \$11. Order from Campbell's Music Co., 1108 G St. N.W.

Jan. 21—Inaugural Ceremony at the Capitol, noon; standing-room for 50,000 or more; seats for 14,000, free. For a reserved seat, contact your city or state GOP party office, or your local congressman.

Inaugural Parade starting at 1:30; seats along the route from \$3.50 to \$18.75. Highest prices are for seats opposite the White House across from the Presidential box. Order from Parade Ticket Committee, 1022 15th St. N.W., or through your state GOP organization if you want seats from \$7.50 up.

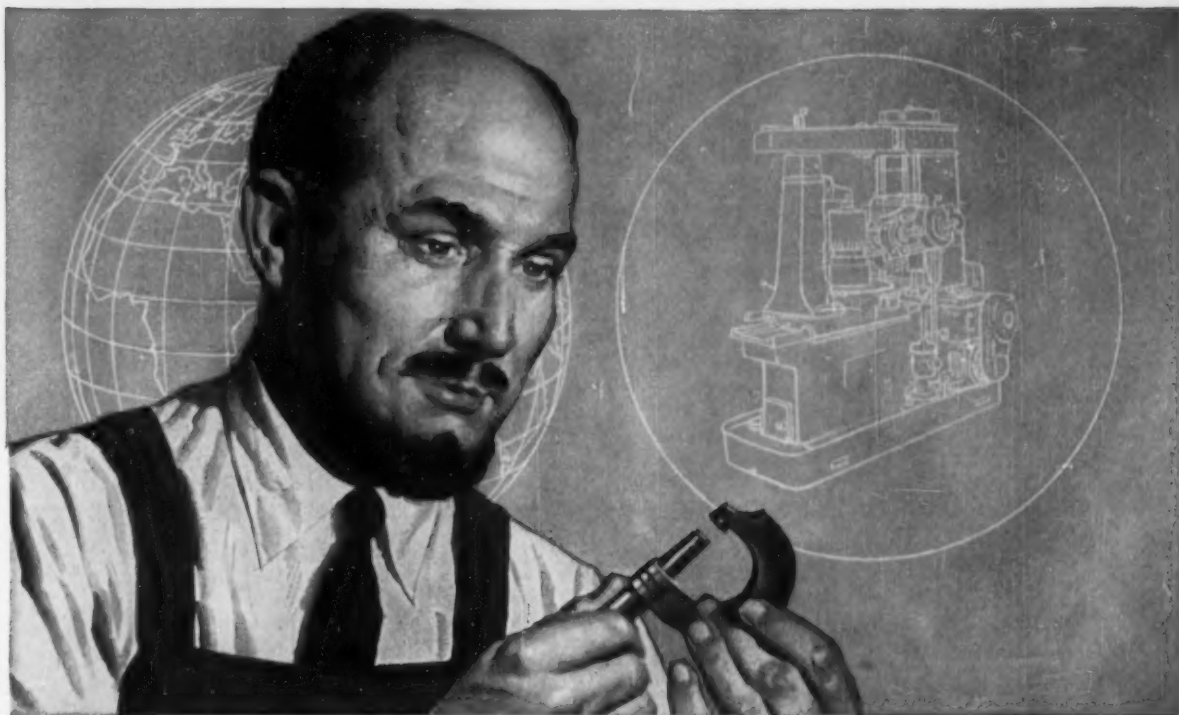
Inaugural Ball starting at 9:00; for 7,300 couples, at \$30 per couple, by invitation. It may not be too late to get a bid through your state inaugural liaison officer (whom you can contact through the GOP organization).

Black tie is required for the Inaugural Concert; white tie and tails are properly worn to the Inaugural Ball, though black tie will suffice. You will find a score of "Dress Suit Rental" shops listed in the Washington classified telephone directory—who can fit you out on fairly short notice.

For executives who like to cook, here's a recipe from Luchow's Restaurant, New York, that may solve the problem of leftover holiday turkey: Dice turkey and mushrooms; saute together. Add a sour cream sauce to leftover turkey gravy. Mix turkey and mushrooms into sauce; simmer. Serve with wild rice and raisins on the side.



POWERGRIP "TIMING" BELTS



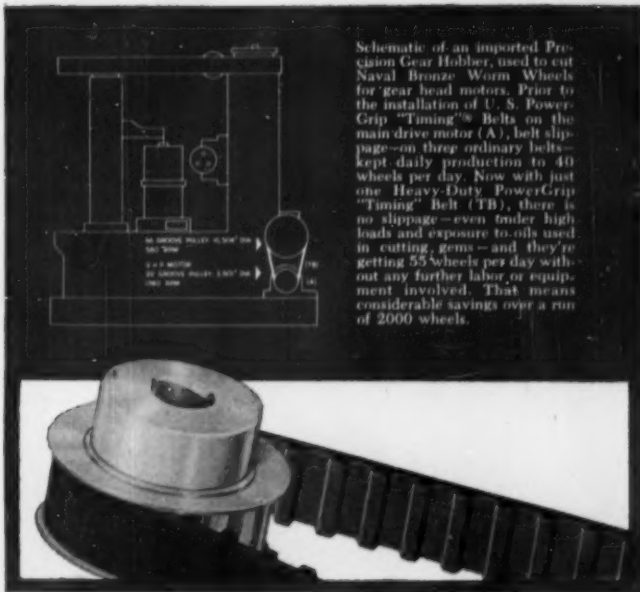
"Old World Craftsmanship" is not enough...

A certain hobbing machine of European manufacture is considered by many to provide the best method of cutting precision gears. But this triumph of Old World craftsmanship wasn't enough to suit one smart plant engineer. He installed a U. S. PowerGrip "Timing"® Belt and production promptly went up 37%—and wheels came out with a better finish. Naturally, this resulted in considerable cost savings.

The unique ability of U. S. PowerGrip to step up production is one of the many ways in which it simplifies and improves a power transmission unit.

For the design of hand tools, drill presses, saws, electric typewriters, machine tools, processing equipment—from fleapower to 1,000 horsepower—get U. S. PowerGrip "Timing" Belts.

These—plus expert engineering service—are obtainable at the 28 "U. S." District Sales Offices, "U. S." power transmission distributors, or contact U. S. Rubber, Mechanical Goods Div., Rockefeller Center, New York 20, N. Y. In Canada, Dominion Rubber Co., Ltd.



Mechanical Goods Division

United States Rubber

MANAGEMENT



PILOT for Bell Aircraft Corp.'s return to production field is Pres. Leston P. Faneuf, who stepped up from executive vice-president.

Bell Revs Up for New Take-Off

Bell Aircraft first made its name producing planes. After the war it switched to research and development. Now it's set to take off again in production. Here's why it's shifting—and how.

Bell Aircraft Corp., once a big factor in aircraft production, and now an even bigger name in aircraft research, is getting set to claim the best of both worlds. It isn't giving up research by a long shot, but it's tuning up also to return to the production field from whence it came.

It was at the end of World War II—with a solid production record of 13,000 P-39 fighters and 663 B-29 bombers behind him—that Lawrence D. Bell, the company's founder, firmly turned his back on any more production work.

Before his death last October, however, Bell had already started the shift back to production. Now Leston P. Faneuf (picture, left)—long the founder's right-hand man, designer of the company's reorganized setup, and its current president—has taken over the controls for the return trip.

• **Changing Patterns**—In taking leave of production a decade ago and returning to it now, Bell Aircraft has aimed at keeping ahead of the changing patterns of its industry.

At the war's end, Lawrence Bell saw rugged years coming for military plane producers. So he declined to enter any more design contests for the next generation of fighters or bombers. It looked to him, too, as if such companies as Douglas Aircraft Co., Boeing Airplane Co., and Lockheed Aircraft Corp. would have the civilian transport market pretty well sewed up. So he saw little future for his company there either.

Instead, he turned to rockets, missiles, vertical-lift aircraft (pictures, right) and research. "That," he said, "is what's going to win the next war." And though the payoff might be slim for 15 to 20 years, he turned his company into a "frontier" research group.

In part this was dictated by the economic facts as Bell saw them. In large measure it was also due to his personality. Bell was not particularly interested in production or profits for their own sake. He was enthusiastic, almost visionary, about what lay ahead in the aircraft field, and he wanted to be one of the first to get in on it. There was another point, too, though he and his fellow executives didn't make much of it publicly—a feeling that national defense required work along this line, and that Bell Aircraft should do it.

• **Pioneering**—As a result, during the

postwar period Bell has pioneered in:

- Rockets, missiles, and the electronic controls and guidance systems they use.

- High speed rocket planes. Bell built the X-1, first to break the sound barrier, and the X-2, the present altitude record holder.

- Vertical lift aircraft—both jet and propeller-driven types.

There have been other pioneering projects, too, but these are still under wraps.

• **But Not Production**—By and large, this type of work has involved research studies, plus the construction of one or two equipment prototypes—but not full-scale production. It hasn't taken up much capacity. And it hasn't paid too well; the average return has been about 2% net on the costs involved.

Consequently, both to keep its plants busy and its profits reasonable, Bell Aircraft turned to whatever miscellaneous production it could get. The bulk of this was in jet engine nacelles for the B-47 and now for the B-52 bomber, and rocket engines for the Nike anti-aircraft missile program—all on a sub-contract basis.

In the early 1950s, Bell's own helicopter program got off the ground into heavy production. To sweeten things up still further for the stockholders, Bell has diversified into profitable civilian businesses via acquisitions.

But with all these miscellaneous ventures, the central fact remains: Bell Aircraft hasn't had a production plane of its own for 11 years.

• **Why the Shift?**—Now, however, a number of factors are combining to turn Bell around and take it back into prime contracting and volume production.

• **First**, the nature of the aircraft industry has changed. Planes are turning more and more into electronically controlled, manned missiles. Airplane production companies are crowding more and more into Bell's field of missiles and research. So, to compete better on its own ground, Bell wants to round out into actual volume production.

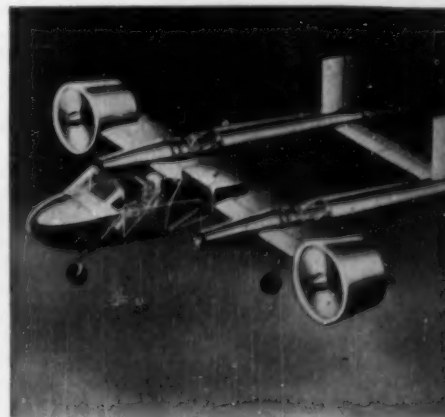
• **Then there's the profit angle.** Production tends to pay better, with a return that's double and more what research brings in. Bell presently nets about 3% profit on sales and its 17% return on net worth tags behind the industry's average of 20% return on net



FLIGHT Among vertical rising craft, helicopters are well established; Bell looks for bigger civilian market.



TEST Convertiplanes, their blades forward for high-speed flight, are under development in vertical-rising field.



DESIGN Ducted fans on wing tips also have promise—but haven't got past this artist's conception.

"... Bell sank some \$10-million of its own into developing its basic three-passenger helicopter Model 47, before it got a single military order ..."

STORY starts on p. 104

worth. It would like to catch up.

- **Finally**, a number of Bell research projects have reached a point where production contracts may be forthcoming.

- **Changeover**—Getting back into quantity production after a decade of concentration on research involves a major transformation. To ease the process, Bell has been reorganizing itself. As one part of the reorganization, it has set up an Aircraft Div. to take over any plane work the company may get now or in the future. Author of the reorganization plan was Faneuf, who was executive vice-president until he stepped into the presidency last September when Larry Bell switched over to chairman of the board.

I. Research and Sales

Faneuf, explaining the company's evolution away from production and now back into it again, finds in its history the key to where it's headed.

Bell Aircraft came into being in 1935 only because Consolidated Aircraft, of Buffalo (now Convair Div. of General Dynamics Corp.), got a big Navy order and moved to the West Coast. Larry Bell, a vice-president and general manager at Consolidated, decided to stay in Buffalo, got support from prominent local citizens, and raised capital to start a new plane company to help fill the hole left in the city's payrolls.

By 1936, his crew had designed a high-speed, 300-mph. plane, but the Army Air Force only ordered 13. His next design, though, hit the jackpot. This was the P-39 Airacobra, a 400-mph. speedster that carried a 37-mm. cannon in the nose.

With war clouds gathering in Europe, Bell was in mass production by 1939. Employment soon reached 50,000. Sales hit a peak of \$317-million in 1944.

- **Postwar Doldrums**—When the whole aircraft industry shut down with a bang at the war's end, Bell Aircraft, like others, was looking for something else to do. Toward the end of the war, Bell had built this country's first jet plane, the F-59 Airacomet, a prototype model. Bell might have used this foothold to move into development of new fighters, but Lawrence Bell's mind was set on missiles, electronics, and rockets.

Bell kept his core of engineers and technicians together, and met plant overhead by turning out juke boxes and motorized wheelbarrows.

Gradually, research projects took shape in Bell's chosen field of rockets and missiles. A versatile group of experimental engineers was building up. Bell's reputation in the trade as a development company in this field was growing, and its name got into the public eye as a producer of helicopters and of such rocket planes as the supersonic X-1.

But business was slow. By 1949, Bell employment was down to about 3,000, on sales of \$12-million.

- **Korean Push**—Then Korea set the country to reviving its defenses, and put the aircraft industry back on its feet.

For Bell Aircraft, this meant an extra push in three fields:

- **Subcontracts**. In the Korean and post-Korean air buildup, Bell was able to find airframe and engine nacelle subcontracting work to keep its plants busy, and to generate some extra cash and profits.

- **Missiles and research**. Old missile projects were speeded up, new ones started. Bell got into production of Nike rocket motors, built up sales on its missile guidance systems, too.

- **Helicopters**. Bell had been working on these since 1941, and had sunk some \$10-million of its own money into developing its basic three-passenger Model 47 (which sells for close to \$48,000) before it got a single military order. Before 1950, civilian sales were minuscule, too. But in Korea, helicopters were invaluable in evacuating wounded and in communications. Sales zoomed, and by 1951 the business was big enough for a plant of its own at Fort Worth. (At present, military orders come to about \$40-million a year, and civilian sales are at the \$8.5-million mark. By 1960, Bell looks for a \$30-million market for its civilian 'copters.)

- **Branching Out**—The Korean push also gave the company cash and incentive to broaden out into still another area—diversified civilian products.

Actually, it had made its first acquisition back in 1948, when it picked up the W. J. Schoenberger Co., of Cleveland, producer of parts for the gas appliance industry.

This paid off, and in 1954 Bell acquired two more subsidiaries: (1) the American Wheelabrator & Equipment Corp., Mishawaka (Ind.)—now just Wheelabrator Corp.—blast and cleaning and foundry equipment; and (2) the Hydraulic Research & Mfg. Co., Bur-

bank (Calif.), high pressure valves and servomechanisms.

Since then, the company has created another subsidiary, Bell Automation Corp., Rochester, (N. Y.), which is now producing continuous weighing systems.

It was Faneuf who masterminded Bell Aircraft's moves into civilian products. And since all the moves turned up a profit, the company is naturally on the lookout for more of the same.

II. Blueprint for Change

But that's only one of the developments Faneuf sees coming, as Bell Aircraft gets deeper into production. Here's the over-all picture ahead, as Faneuf paints it:

- **More civilian product lines**. Presently, these account for only 14% of total sales—roughly \$28-million out of \$204-million sales last year. But they account for about \$2-million in profits, or 35% of the total. By picking up more money makers, Bell hopes to get civilian goods to provide 50% of profits.

- **Re-entry into military aircraft design competitions**. Bell recently won a competition for a high-speed, long-range plane, but lost out when the Air Force suddenly dropped the project. It will get into others.

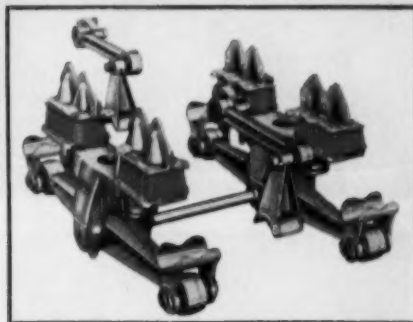
- **Aggressive seeking out of production contracts for vertical-rising aircraft** of various types—hitherto handled on a research and prototype basis. Bell recently sank \$1-million of its own into developing a vertical-rising jet. It's now working on a \$1.5-million development contract for such a jet for the Air Force, with hopes for a production contract. It is also doing studies on various propeller-driven vertical-rising craft.

- **High hopes for production of the Rascal missile**, a high-speed, long-range, guided monster the size of a World War II fighter plane. Bell has developed it as an air-to-ground missile for the Air Force.

- **Eventual production—first for the military and later for civilian use—of an automatic landing system** that locks onto a plane as it makes its approach and brings it down with delicate precision on a fogged-in field or on the pitching deck of an aircraft carrier.

Any one or all of these projects should be ripening in the relatively near future.

- **Pilot**—Faneuf, who will be handling the controls in these new Bell Aircraft ventures, has now had 13 years as a top Bell aide to prepare himself for the job. He came to Bell in 1943 from a varied career as teacher at a boys preparatory school, magazine publisher, political reporter, civic administrator, public relations director for a bank, and



The unique design of the "load cushion" accounts for smooth, even rides in the full range of loads, empty to full. Enjay Butyl Rubber (in red) made it possible.

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replaces steel springs in big Tractor Trailers

The "load cushion" is an important innovation in tandem suspension. Developed by the Hendrickson Mfg. Company, it is made of Enjay Butyl and replaces steel leaf springs. Utilizing the great strength and impact resistance of Enjay Butyl, the "load cushion" gives the ultimate in a soft, easy ride within the complete range of loading, from empty to full. Besides giving a smoother, steadier ride, it increases tire mileage, reduces weight and significantly reduces wear and tear on equipment.

Enjay Butyl has proved to be the answer to problems in many fields of industry. It may well be able to cut costs and improve the performance of your product. Low-priced and immediately available, Enjay Butyl may be obtained in non-staining grades for white and light-colored applications. Get all the facts by contacting the Enjay Company. Complete laboratory facilities and technical assistance are at your service.



Enjay Butyl is the super-durable rubber with outstanding resistance to aging • abrasion • tear • chipping • cracking • ozone and corona • chemicals • gases • heat • cold • sunlight • moisture.

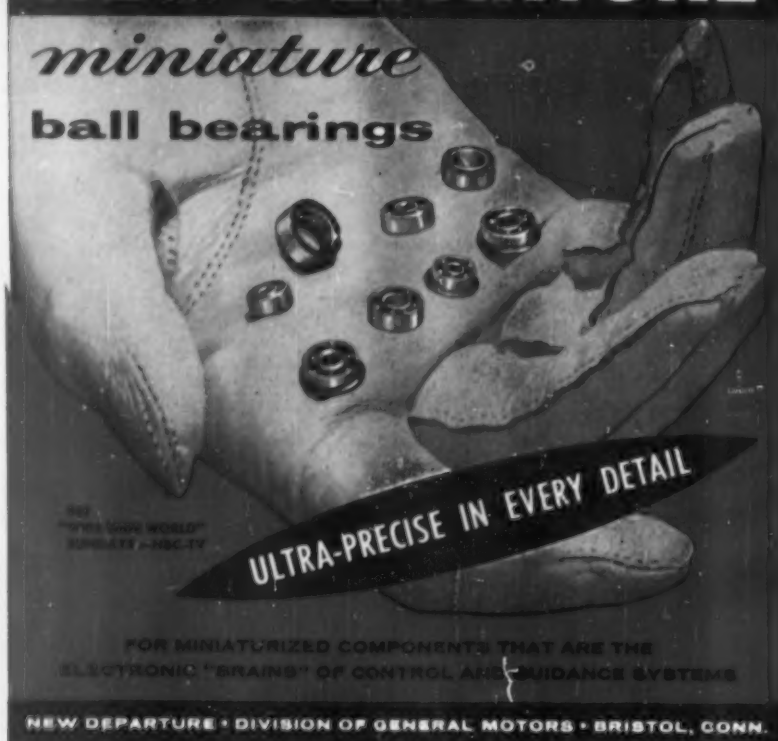


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NEW DEPARTURE

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ROURA IRON WORKS, INC.
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assistant regional director of the OPA.

During the war he was Larry Bell's chief of staff, with the title of special assistant. In 1945 he became company secretary. In 1946-47 he was a key man in fighting off a determined raid by outsiders to take over the company and its impressive pile of war-accumulated cash. Later, as Larry Bell turned more and more detail over to him he became an obvious heir-apparent.

• **New Setup**—To prepare Bell for further growth and a plunge into production, Faneuf and other key executives have reorganized it on a product-line basis. They have broken the organization into what are almost five separate companies grouped in two major divisions.

Up till last month, Bell's research, product development, and parts subcontracting was handled under what amounted to one administrative roof. Two departments—engineering and manufacturing—jockeyed the bits of pieces of the business back and forth between them. "Everybody did a little bit of everything," says Faneuf, "and you can bet that having parts from 90 different contracts of one type or another move through one production facility got to be a problem."

Now the new Aircraft Div. will have charge of any plane work that comes to Bell. It will be doing its own sales, design, development, and production work.

The Weapons System Div., which breaks down into four sub-units, will have similar responsibilities for: (1) Avionics—electronics, and guidance systems; (2) Rockets—design, test, and production of rocket motors; (3) Missiles, including the Rascal, and others still under wraps; and (4) Research, which besides servicing all other departments will conduct studies of its own on high-speed aerodynamics and heat problems.

• **Flexible**—This new setup permits any department—if it gets enough business—to expand under its own steam, and perhaps eventually to reach the status of a separate subsidiary, Faneuf says. To show that he means it, he points to the helicopter division, which next month will be made into a subsidiary and allowed to operate pretty much on its own.

• **Finances**—Getting the money to grow with is Faneuf's next order of business. Luckily, Bell has no long-term debt and no senior securities, just common stock. This puts it in a position to seek out cash by whatever method money market conditions suggest. Right now Bell plans to increase its present \$20-million line of back credit to \$25-million. Sometime over the next few months it will make some long-term moves but it's not saying yet what it has in mind. **END**



Whither?

THE INNKEEPERS looked, and shook their heads.
"No room — the house is filled — pass on!"

Pass on? WHITHER?

The world almost 2000 years later pleads the same question . . . *whither?* In the centuries since the first Christmas Eve, mankind many times has plagued itself with violence and sorrow, and

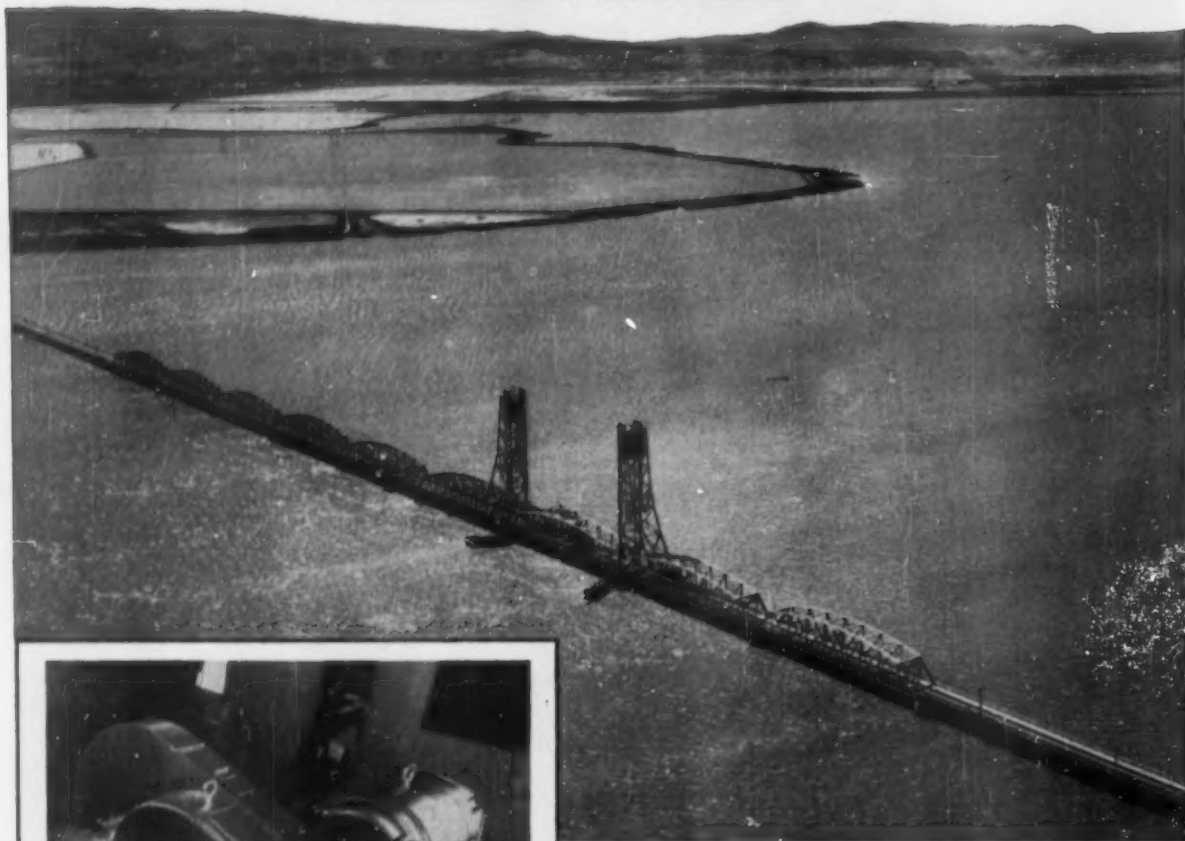
whole nations have engulfed and lost themselves in the mad race — *whither?*

This season of the year recalls *the way* as it was shown by Him who spoke guidance for all peoples in all years. May it be the prayer of men on this anniversary of the birth of the Prince of Peace that our world may move in the light and understanding of His words . . . "on earth, peace, good will toward men."

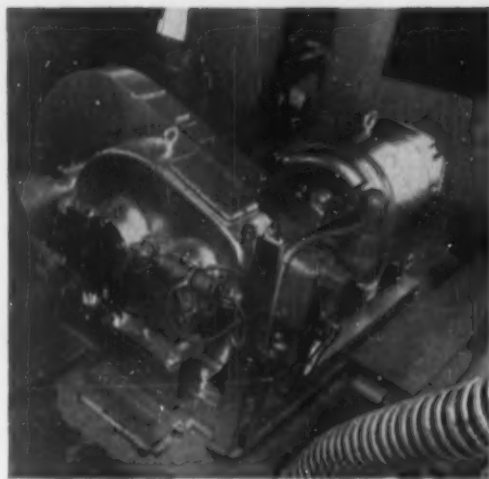
Norfolk and Western Railway

WAGNER ELECTRICAL PRODUCTS . . . THE CHOICE OF LEADERS IN INDUSTRY

California uses Wagner Motor and Brake for electrically-operated bridge



Dumbarton Bridge at Palo Alto crosses the Southern Arm of San Francisco Bay.



This 50 hp Wagner Motor transmits power through a single reduction gear to existing gearing in the draw span. A type HM Wagner Bridge Brake is installed on the high speed shaft of the gear.

The Dumbarton Bridge, across the Southern Arm of San Francisco Bay, has switched from gasoline to electricity for the power to open and close the draw span.

When making recent changes in the equipment that raises and lowers the center span, California's Division of Highways used a 50 horsepower Wagner wound-rotor crane and hoist motor for the power to operate the span . . . efficiently, dependably. Another application of a Wagner product is an industrial hydraulic brake to provide controlled braking during the movement of the span and to "park" the span in any position.

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W157-1



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ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES • AUTOMOTIVE BRAKE SYSTEMS—AIR AND HYDRAULIC

Retailers Join the Talent Hunt

- Department stores and chains, expanding fast, face a notable scarcity of management trainees.
- They're handicapped by old prejudices—against the hours, the starting pay, supposed lack of prestige.
- Stores are fighting back by stressing chances for swift advance. And they're improving conditions, too.

With the race for new management talent heating up across the board, one of the biggest segments of the U.S. economy—retailing—faces a bitter paradox. It's a field that claims its rewards come both bigger and faster than the average of industry, yet it has the hardest time of all to attract young management potential. Facing a growing shortage, the retailers are stirring around to reverse the situation.

Just the department store and non-food chain store section of retailing, where operations are big enough and complicated enough to require top managerial talent, is a \$40-billion annual business. It absorbs, directly, an estimated 24-million employees. And it needs more "executives"—in the sense of people able to supervise others, use individual initiative, and accept responsibility—than any other industry. According to one estimate, the field uses at least one executive for every 10 employees.

• **Expanding**—Retail sales are going steadily higher year after year, regardless of seasonal or area fluctuations. Big chains are continually opening more outlets, big "downtown" stores are branching out into suburban areas with satellites only slightly smaller than the parent store. But the supply of qualified people to run these expanding businesses is far below the need.

Actually, the problem is a comparatively recent one. Until the last generation, almost until the last decade, many department stores, even many of the chains, were owned or controlled by family groups. It was understood that top spots would be filled within the family, and there was no urgency to find key outsiders. At the same time, many ambitious men hesitated to enter a field where, with top spots blocked off, horizons were definitely limited.

But since World War II, the situation has been changing. Retailing companies have expanded far faster than families could supply talent. And many family companies have been sold, for estate or tax reasons, to bigger, publicly owned companies.

• **Prejudices**—During the transition, the reservoir of talent on its way up has

been lower than it has for many industrial companies. And the prejudices against the business continue to complicate recruiting.

To see how retailers were meeting the situation *BUSINESS WEEK* surveyed a cross section of top companies across the country. It found broad agreement on the problem—and a new trend in a "hard sell" to attract candidates.

Stores today have trouble not only in recruiting good management personnel, but in holding them afterwards. Here's the fairly typical experience of one large Eastern retailer. Between 1948 and 1956, the company hired 320 college graduates for management training. Today just over 100 remain. The rest, by and large, couldn't or wouldn't ride out the first couple of rough years. The main reasons for leaving: low prestige, insufficient salaries, inconvenient working hours.

Most retailers are well aware of the career prejudices stacked against them—and are willing to concede that in many cases the prejudices have had some short-term justification.

• **Starting Pay**—Most stores maintain that executive salaries are on a par with those in industry, but they generally agree that starting salaries have been somewhat lower. One store executive puts the traditional spread at about \$50 a month.

Starting salaries haven't been the only stumbling block. Here's how one important retailer sums it up:

"Night work (the store is open two nights a week) and Saturday work, social prestige, and opportunity are the things they worry about before they come in with us. College graduates frequently figure retailing is a 'cheap' job—one anyone can get as a last resort. They don't think it has prestige—something they can make out to friends as being really important. Night work is a stumbling block. The young husband quickly becomes aware he's the only one on the block who has to work Saturdays and whose evenings are unpredictable."

• **New Baits**—Stores today are revamping traditional—and often unattractive—operating methods in order to get and

keep the men they need. They're starting to use the sort of special inducements that industry has been waving for almost a decade. There's more talk of retirement funds, stock participation plans.

"Just try to hire an executive away from Sears," says a Midwestern department store head. "With their stock bonus and retirement plan, it can't be done."

To get potential talent in the first place, retailers are not only correcting some of the more immediate objections—but are starting a drive to exorcise the impressions that are already abroad.

The hours bugaboo, notes the president of one of the largest department store chains, is rapidly on its way out. "Sixty shopping hours for the customer does not mean the same number of working hours for the employee. Certainly retail executives work some Saturdays, some nights. But the trend to a five-day week, to scheduling time off for executives, to a definite limitation on night work and the total executive work week has been going on for years."

Starting salaries are moving up. They still run behind engineers, but compare favorably with beginning rates offered the nonspecialized liberal arts or business administration graduate. One chain puts its starting rates anywhere between \$325 and \$425 a month. Another chain says that for youngsters who look particularly desirable, or have readily usable skills, it will match or exceed industrial offers. One company suggests it pays "more than the new man is worth" to keep him happy for the crucial first couple of years.

• **Long-Range Advantages**—But in their search for new talent, retailers are putting the hardest sell on long-range advantages—and rapid advancement.

A West Coast retailer lists these inducements: "You succeed fast. You get paid well if you succeed. You have more freedom of action than anywhere else in business."

In its pitch to college students, one Eastern store says: "... if you want to 'arrive' while you are still young, make your career in retailing." Three of the six pages in its recruiting brochure are devoted to the store's operational setup—and the routes to the top.

• **Accent on Youth**—One big store surveyed the employees it had hired as college graduate trainees over the past decade—few of them now much over 30 years old—and found that a quarter of them were already in the \$10,000 to \$14,000 bracket.

A major chain with headquarters in the Midwest also took a look at what

had happened to its executive trainees. After five years, most were earning about \$7,500, with some going to \$12,000. In one of its stores, 50 of the 105 buyers had made that grade in five years or less. This company pays its buyers from \$10,000 to \$30,000 a year; divisional heads in its larger stores get \$18,000 to \$50,000.

The rapid upward movement is itself a fairly new phenomenon, compounded of increasing sales and wider moves to branch stores. With so many more openings, the moves up the ladder from inside have been accelerated.

• **Being a Boss**—In their recruiting, the retail men are hitting hard at another selling point. "A good man likes to run something," says one chain head, "and this business gives him a better chance than industry."

Another suggests that with so many points of responsibility, the opportunities to use individual judgment and initiative come much sooner than in industry. "Every buyer is to some extent his own boss. He's gambling on his own actions—and the company is gambling on him—at a point where his counterpart in industry is still on a tight rein following routine orders.

• **Training Stressed**—To make the best of what they do get, retailers are expanding their training programs.

Often in the past, retail training programs consisted largely of "this is how we fill out a sales slip here," to get a new man into a productive spot as soon as possible.

Today more stores are recognizing that thorough training at the start is mandatory even if practical results do not show up for a considerable time. One chain figures it's getting no direct monetary return for almost three years—and considers that it's worth it.

Systems vary, ranging from three weeks to almost a full year of formal training, but the trend is toward longer and more comprehensive indoctrination.

One eastern chain starts its trainees off for three months with routine work behind a counter or in a stockroom, then gives them a formal three months course. For two and a half to three years, after that, the trainee is shifted every few months, to work in as many departments and branches as possible.

One Midwestern store tailors its training to the individual. A separate program is prepared for each trainee on the basis of his previous experience, education, and potential.

• **Newcomers Only**—Oddly enough, considering the widespread recognition that the incoming crop needs training, few stores are doing anything about further training for the executives they already have. It's rare indeed to find retailing officials at the advanced management courses of the universities or the management associations.

In Management

• • •

Promotion at Pacific Lighting Corp.

Puts Robert Hornby on the Top Rung



Pacific Lighting Corp., the biggest natural gas utility in the country, has picked a new president to guide its growth. Fifty-six-year-old Robert Hornby (picture) moved to the top spot earlier this month from the executive vice-presidency.

His predecessor, Robert W. Miller, president since 1940, moved to chairman, a spot open since the death of company founder C. O. G. Miller in 1952.

Pacific Lighting's operations, set in the middle of one of the

fastest growing population centers in the country, Southern California, have grown with the area. Since 1940, sales have moved up from \$45-million to \$208-million last year, and profits have grown from \$6.6-million to \$21-million.

• • •

Proposed Ruling Would Plug

Entertainers' Income Tax Loophole

Corporations depending for revenue on the services of an individual will no longer benefit from the 52% corporation tax rate, if the Internal Revenue Service has its way. The revenueurs want to apply personal holding corporation rates (75% of the first \$2,000 income, 85% of the rest) to these companies. Hardest hit, if the proposed ruling goes into effect, will be entertainment stars who have set up corporations with themselves as the chief asset.

By setting up a corporation, an entertainer pays personal income tax only on the salary his company pays him. All profits of the corporation go into the surplus accounts of his company. The company can then spread out dividend payments to the star, its major stockholder, so he won't be hit with personal income taxes on them all in one year. The star, through his company, can use the funds in the surplus account to invest in other businesses. And eventually, he can dissolve the corporation, paying only a 25% capital gains tax on what's left in the surplus account.

The ruling theoretically went into effect last week, and is retroactive to 1954, when the present tax code went into effect. But hearings on objections to the change probably will hold up actual implementation by IRS.

The ruling affects any corporation whose outstanding shares are at least 25% owned by the person upon whom the company depends mainly for income. It works this way: Singer John Jones owns, say, 51% of the stock of the J-J Corp. Under contract with J-J, Jones receives a salary of \$10,000. But J-J sells his services to other outfits, such as night clubs and motion picture companies, for \$500,000 a year. Previous to the ruling, Jones paid personal income tax on his salary, and the company paid corporate rates on its income, derived mostly from selling Jones' talent services. Now, the personal holding corporation rates will apply to J-J's profits.



How not to explode a fuel tank

Cleaning out airliner fuel tanks can be a risky job. Fumes from the fuel, or from the cleaning solvents used, are combustible. One spark from a defective cord on a power tool or electric light, and you've had it.

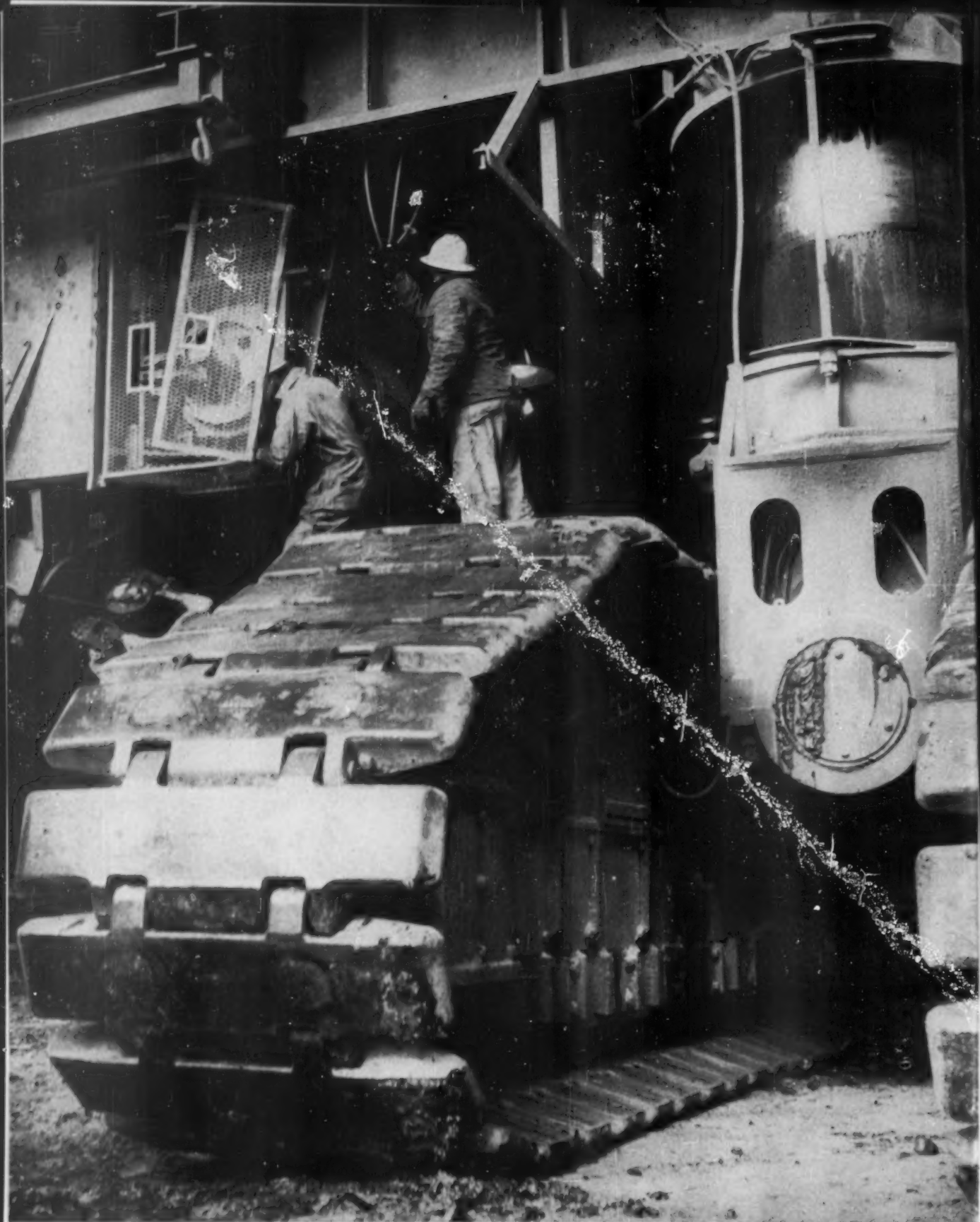
Hazacord, the portable electric cord made by a division of The Okonite Company, is specified by Safety

Engineers for such jobs. Protected by an outer neoprene sheath which has been cured in a metal mold, Hazacord will outlast ordinary electric cords many times over. Hazacord is just one of many quality electrical cords and cables made by The Okonite Company and its divisions. The Okonite Company, Passaic, N. J.



where there's **ELECTRICAL POWER**

...there's **OKONITE CABLE**



MEN ARE DWARFED by contrast with the shovel's crawler units. Each of eight crawlers is 8 ft. high, 23 ft. long, weighs 60 tons.

PRODUCTION

Coal Miner With a 90-Ton Bite

"Moving mountains" is out of date as a measure of the impossible—or even the difficult. In strip mining operations, the coal mining industry does it every day. And even more astonishing than these digging operations are the new and gigantic power shovels that make the work ever easier.

Among really big shovels, the pioneer is Hanna Coal Co.'s Mountaineer, with a 140-ft. boom and a 60-cu. yd. dipper. In greedy 90-ton bites, it can tear off as high as 120 ft. of dirt and rock to expose the underlying coal seam. In one month, the Mountaineer will move something like 2-million cu. yd., or 4-million tons, of dirt—equivalent, at the very least, to a small mountain.

• **Bigger Giants**—Hanna's mighty shovel is, even so, not the last word. Marion Power Shovel Co., of Marion, Ohio, currently has under construction four that are even bigger in some respects. Basically the same as the Mountaineer, these machines have a bigger dipper—to hold 70 cu. yd. Two of the new shovels are destined for the Peabody Coal Co. The Aluminum Co. of America will get another, and the fourth will go to a fully-owned subsidiary of the Midland Electric Coal Corp. of Indianapolis.

Another shovel of similar dimensions—built by Bucyrus-Erie Co. of Milwaukee—is now being erected for River Queen Coal Co., Central City, Ky. It took 80 freight cars to ship the disassembled parts of this one.

• **Vital Statistics**—These monsters are such a far cry from the power shovels that fascinated yesterday's small boys that it's hard to comprehend the size. Some clues to their hugeness:

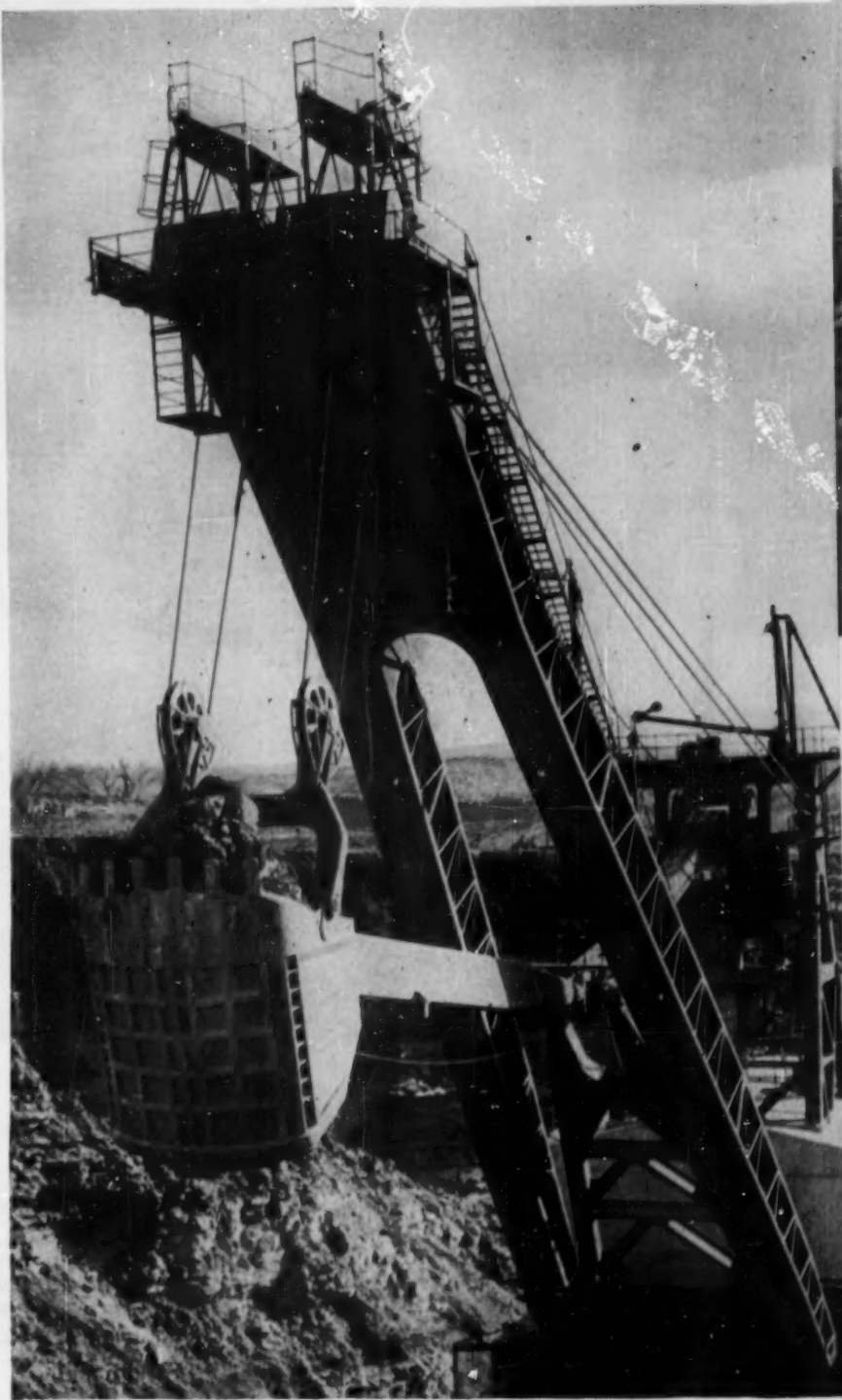
- The Mountaineer's cab is more like a three-story house—37 feet high.

- For flexibility, the shovel has two operator's booths—one on each side of the house.

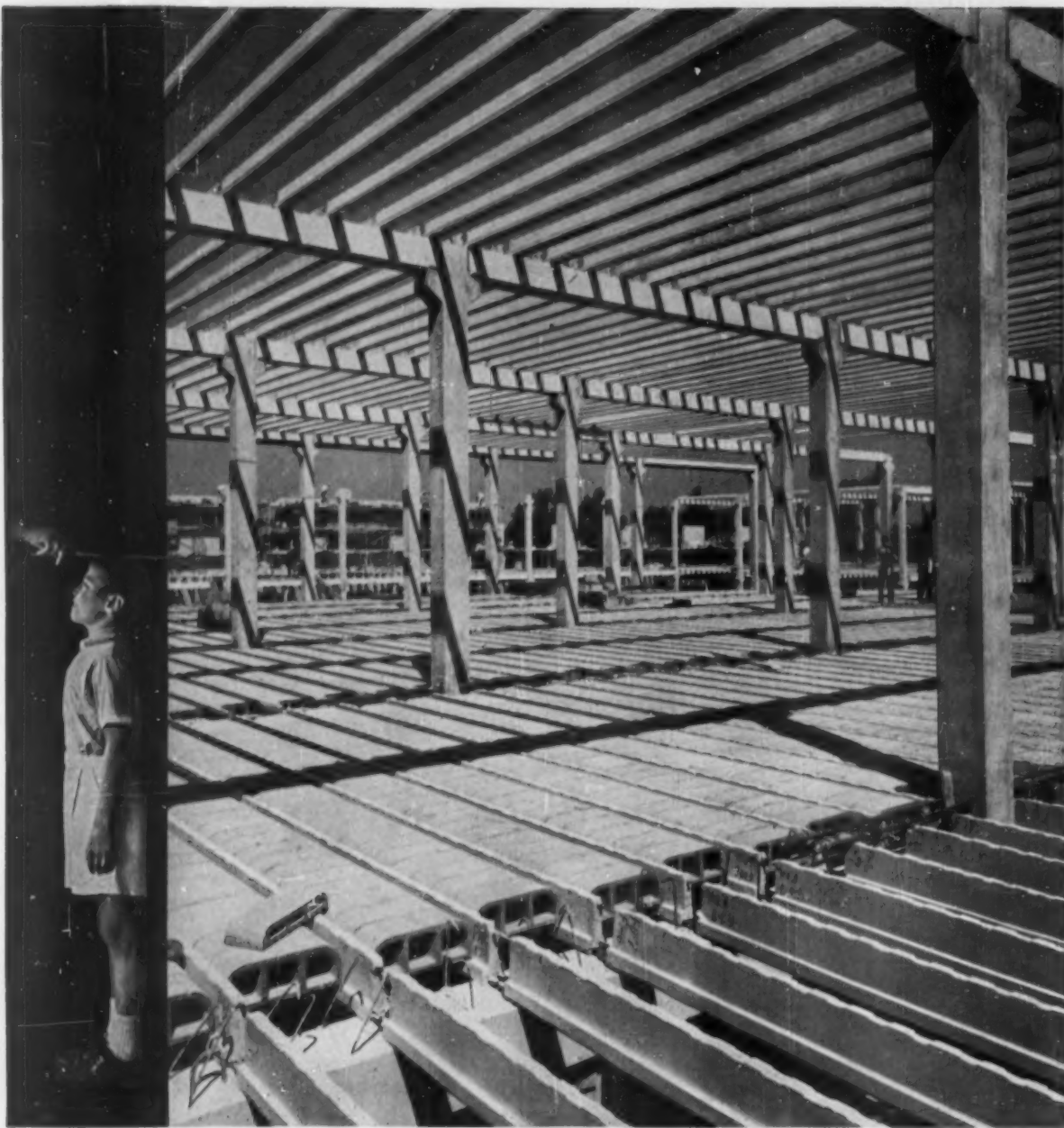
- Even at that, the dipper is so big that it's hard for the operator to see what he's doing. So Hanna is thinking of mounting a television camera at the end of the boom and putting a receiver in the cab—so the operator will have a TV fan's view of what's going on outside.

- An automatic elevator, riding inside the shovel's five-foot center pin, lifts the operator aboard. This significantly reduces the hazards of clambering on and off while the shovel is in operation.

It takes a lot of horsepower to run a mammoth such as this. A separate 250-hp. electric motor drives each of



TELEVISION may be used to help operator, in cab, see what shovel's snout is up to.



GROWTH... *and precast structural concrete*

Precast structural concrete—little known a generation ago—is tailor-made for America's continuing demand for new construction.

The rapid increase in the use of precast concrete beams, girders, columns, wall panels, roof slabs and floor systems is evidence of the adaptability and economy of these structural shapes . . . for all types of construction. Manufactured under rigid factory control and ready for fast erection, precast concrete is strong, durable and fire safe.

As our nation continues to grow, and as new applications of concrete like this come increasingly into use, the demand for cement, the basic ingredient of concrete, will become even

greater. The entire cement industry has taken . . . and is still taking . . . steps to meet this challenge of growth.

Since 1946, for example, the Lehigh Portland Cement Company has spent \$113,000,000 to expand production facilities. Our 1957 construction program calls for expenditures of \$35,000,000 to further increase the supply of Lehigh Cements.

This is *growth* for the future . . . growth that insures growth.

LEHIGH PORTLAND CEMENT *COMPANY*
Allentown, Pa.

(Story starts on page 114)

the four 8-ft.-high crawler units—but even with all this power, the Mountaineer's ground speed is a snailing 4 mph. To swing the Mountaineer's boom, four 187.5-hp. motors supply the force. And two more 187.5-hp. jobs do nothing but thrust the dipper handle in and out. The hoisting or digging force—bail pull—comes from a quartet of 500-hp. motors.

Total input horsepower is 4,650—a lot more than propels a good many merchant ships, including the World War II Liberty, which has 2,500.

• **Assignment**—The part played by these giants in strip mining is to remove 80 to 120 ft. of dirt and rock, already loosened by blasting, that overlies the coal. In the process of uncovering the coal seam, the shovels can be said in a sense to spend their lives very efficiently moving dirt from one side of a gully to another.

After the big shovel has gone by, bulldozers scrape the seam clean, and then smaller shovels—9 cu. yd.—take over to remove the coal. It goes from there to cleaning plants in special 55-ton trucks, which use part of the uncovered coal seam for a road.

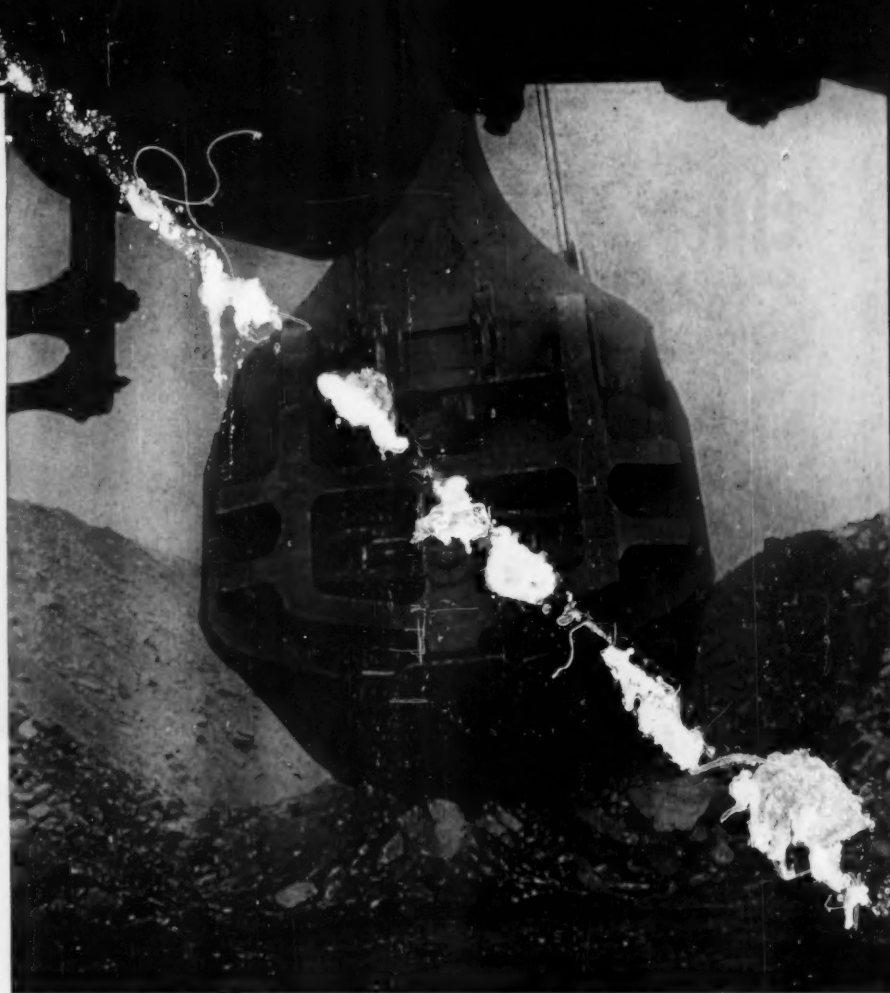
• **Working Conditions**—Even though a shovel the size of a Mountaineer costs about \$2.6-million (including the erecting job, done on the digging site), the machines earn their keep. The cycle time—for digging, swinging, dumping, and return—is an almost unbelievably short 45 sec. Although this speed was designed into the shovel, it's still important to have a skilled operator. A good one will position the shovel so that the swing from dig to dumping is around 90 degrees.

Hanna's Mountaineer puts in a 224-hour day, seven days a week. That makes it possible to turn over a lot of dirt—especially when time lost for maintenance averages only 5% to 6%, against closer to 15% on Hanna's 50-cu. yd. shovels.

• **Purpose**—There's one primary reason for building bigger and bigger shovels—they can uncover coal reserves from under thicker and thicker layers of earth. Before the Mountaineer, the biggest shovels around—the 50 cu. yd. models—were stymied by overburdens thicker than 80 ft. The Mountaineer has no trouble up to 120 ft.

It's difficult to compare operating costs between shovels of various sizes, however. In a sense, the big shovels work on big piles of dirt, and the smaller shovels on smaller piles—all in the same area. To the coal company, the important thing is getting all the coal it can.

Gradually, strip or open-pit mining has been increasing in importance until now it accounts for 23% of all the



HUNGRY MAW is about to gulp 60 cu. yd. of dirt and rock—with 250-ton force.

bituminous coal mined in the U.S. This method, up to a point, is the easiest way to remove coal lying close to the surface. When you have to move more than about 20 cu. yd. of dirt to get a ton of coal, however, strip mining generally doesn't pay. One of strip mining's most endearing features, to the industry, is the fact that almost all the coal can be recovered—against only 50% to 60% in underground mines.

Strip mining operations, as now conducted and considered economical, will not go on forever. In 30 to 40 years the kinds of reserves now being strip-mined will be running out. What happens then will be determined by the over-all fuel supply picture. If the price is right, for example, there are other deeper reserves that can be dug out in layers.

• **No Scorched Earth**—Strip mining's big disadvantage is all the ground it takes—which it completely denudes. For example, Hanna, a division of Pittsburgh Consolidated Coal Co., chews up about 800 to 1,000 acres of eastern Ohio land (centered around Cadiz) every year. For underground mining, by comparison, a relatively small amount of land is necessary.

But the miners, in this day and age, don't just leave in their wake row upon row of heaped earth. All the progres-

sive companies conduct reclamation projects simultaneously with their mining. Hanna, which reclaims about 1,100 acres a year, has become quite scientific about it—even to adding lakes to the landscape. Too rocky for growing crops, Hanna's reclaimed land is said to be excellent for dairy farming.

Land reclamation tacks about 3¢ per ton on the production cost of coal, Hanna estimates. This means strip-mined coal suffers an automatic 3¢ handicap over other coals—no matter how efficient the mining operations may be.

• **How It Grew**—The Mountaineer didn't just develop from earlier and smaller shovels. Its design resulted from a lot of soul searching by Hanna and Marion engineers. They gave special attention to the size and effectiveness of the control motors—and this paid off in a substantial reduction in cycle time over the 50-yd. models.

Engineers also cased one of the biggest maintenance bothers—wear and tear on the roller circle (on which the huge cab revolves). The deck under the circle was constructed of solid plates, rigidly supported by a welded frame, rather than built up of laminated plates as before. Where needed, special double-strength steels were used to provide ruggedness and lessen down time. **END**

clues:

To The Solution
of Management
Men's Problems

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NEW PRODUCTS



Taking the Bounce Out of Checks

Supermarket operators have found
that one of the most effective ways to
stop bad check losses is to photograph
each check and its bearer when it's
cashed. Now, a low-priced camera unit
that sits on the counter top may bring
the system into wider use.

As a rule, supermarkets have set up
fairly complex booth-type installations,
complete with bright lights, to nail
down the identity of the check casher.
Other retail outlets haven't had the
check volume to warrant the expense
and the space.

- **Unobtrusive Check**—The new camera,
called the Regiscope, operates in
available light, uses high speed 16-mm.
film. It is more or less unobtrusive,
and operates mechanically. A flick of
a lever on the back of the unit snaps a
simultaneous picture of the customer
and his check, which is placed on a
check tray on the base of the stand
(picture). The camera uses a standard
100-ft. load of 16-mm. film, which is
good for 1,800 photographs. As in
other check-photographing systems,
there is no need to develop the film if
no bad checks turn up.

The Regiscope is made by Radiant
Mfg. Corp., Chicago, Ill., a division
of U. S. Hoffman Machinery Corp.

- **Added Applications**—The device can
also be used for making unalterable
identification cards, which have pic-
tures and credit identification data
printed in plastic or on metal. Other
suggested applications are charge ac-
count control, small loan and install-
ment buying records, narcotics pre-
scription sales records, and equipment
rental identification records.

But Radiant sees its biggest market
in check cashing, points out that the

use of checks is growing, and has al-
ready reached a level of \$1.6-trillion in
the first nine months of this year. Losses
in bad checks are also on the increase.
In 1953, the last year for which sta-
tistics are available, the loss was esti-
mated at over \$500-million.

The Regiscope can be leased or pur-
chased. It costs \$295 to buy.

NEW PRODUCTS BRIEFS

Bigger bathtubs for ultrasonic cleaning
installations have become more prac-
tical with the development of an all-
welded stainless steel vibrating element.
The new element, or transducer, has 52
sq. inches of radiating area; energy
efficiency is claimed to be 90%. Manu-
facturer: The General Ultrasonics Co.,
Hartford, Conn.

Wheels that spin on long grades are a
headache for freight locomotive engi-
neers; one cause of it is an almost in-
visible oil film that coats the rails. A
new chemical, developed jointly by
General Electric Co., National Alumi-
nate Corp., and the Reading RR can
cut the film, boost traction by 25%.

Bright lights without electricity that
last up to 10 years without maintenance
get their power from radioactive Kryp-
ton 85 gas. The lights are expensive
(\$75 to \$100 or more), but practical
for installations far from power sources,
such as harbor navigation lights. The
lights are manufactured to custom
specifications by the United States Ra-
dium Corp., Morristown, New Jersey.

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Even a Union Can Get Too Big

Most businessmen are familiar with the economist's concept called the "diseconomies of large-scale production." It means, simply, that as you get bigger and make more, your unit costs go down—until you come to a point where further growth makes so many complications that your costs start up again. From this notion derives the idea that there is an optimum size firm which works at maximum efficiency.

Nobody has ever theorized about an optimum size union. But it's about time to begin. The nation's biggest union in manufacturing, the United Auto Workers, is too big. That's now clear from the dilemma it has found itself in and the way it proposes to deal with it (page 84).

Dedicated to expansion and growth, UAW has recruited every man jack it could reach in the auto and allied industries. It now claims a membership approaching 1.5-million, about one-fifth of whom, employed by the big auto companies, are skilled. These skilled hands just don't want their own economic interests submerged by the interests of the unskilled. They threaten to tear UAW apart. To appease them UAW will, in the future, demand separate bargaining and a separate contract for its craftsmen members.

One great advantage industrial unionism purported to offer employers was one bargain and one contract, as opposed to the separatism of craft unionism. That advantage seems now to be on its way out because the unions have put so much emphasis on sheer growth.

UAW breaks new ground in industrial relations for mass production employers, who face new and troublesome bargaining processes. And the question of how long UAW can ride two horses in opposite directions must be disquieting to Walter Reuther and his associates. Unhappily, whatever difficulties it makes for the union will be felt by the industry as well.

Guard Against Communism

How to explain the magnetic appeal that Communism has had for Americans who are in the professions?

One answer came last week from a federal judge, Alexander Holtzoff, in sentencing a young physicist to jail for contempt of Congress. "The younger generation of pure scientists," Holtzoff said, had become a "fertile field for Communist propaganda." He reflected that this was because young scientists did not have "a proper cultural background" and showed "an abysmal ignorance" of history and economics.

We believe that there is a lot of truth in this explanation. But scientists have not been the only ones to succumb to Communist ideology. It has also found supporters among other educated groups, including journalists, clergymen, and teachers. Some businessmen, too, have not been immune to its deceptive appeal.

The reason, we think, is that education by itself is not a safeguard against Communism. It appears plain that the educated are often misled by mistaking idealistic abstractions for reality. The real defense against Communism is for the educated to show intelligence.

The Peaceful Atom

Information of wide significance to businessmen interested in atomic energy was released last week by the Atomic Energy Commission. The commission reported that the U. S. has about 60-million tons of ore reserves—uranium still in the ground. Of this, and the figure is one of the surprises in the report, about 41-million tons, or more than two-thirds of the total, is in New Mexico. Our neighbor to the north, Canada, has at least 225-million tons of known reserves.

AEC also reported that U. S. production of uranium oxide or concentrate has been doubled this year. And the Commission has negotiated contracts for eight more privately-owned mills which will raise output almost one half.

AEC broke the secrecy that has surrounded these figures as part of an effort by the U. S., Canada, and the United Kingdom to encourage private investment in not only mining but power plants. This is only part of a batch of material covering reactor construction, fuel processing, and other phases of atomic research that will be released over the next year. The whole range of material will be highly welcome to researchers and executives who have been thrashing around in a wilderness of classified material trying to get the basic information needed to exploit atomic energy for peaceful uses. In Europe, the Suez crisis has, of course, multiplied the urgency behind atomic power development as a substitute for oil.

We think the three nations and the AEC deserve a "well done" for declassifying this vital information. They are continuing the good work that began at the U. N. atomic conference at Geneva last year, when a great deal of information was released. We hope they'll push ahead with the program to release more information just as rapidly as it can be done consistent with national security.



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